



**SAMSUNG**

# WASHING MACHINE DRUM TYPE

Basic Model : WF0804  
(SCOUT PROJECT)

Model Name : WF1114\*  
(ARNO PROJECT)

Model Code : WF1114XBD/XEF  
(ARNO PROJECT)

# ***SERVICE*** Manual

## WASHING MACHINE (DRUM)



**WF1114XBD**

## CONTENTS

1. Safety Instructions
2. Features and Specifications
3. Disassembly and Reassembly
4. Troubleshooting
5. PCB Diagram
6. Wiring Diagram
7. Schematic Diagram
8. Reference

Refer to the service manual in the GSPN (see the rear cover) for the more information.

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# CONTENTS

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<b>1. Safety instructions</b> .....	<b>1</b>
1-1. Safety instructions for service engineers .....	1
<b>2. Features and Specifications</b> .....	<b>5</b>
2-1. Features .....	5
2-2. Specifications .....	8
2-3. Comparing specifications with existing models .....	9
2-4. Options specifications .....	10
<b>3. Disassembly and Reassembly</b> .....	<b>11</b>
3-1. Tools for disassembly and reassembly .....	11
3-2. Standard disassembly drawings .....	12
<b>4. Troubleshooting</b> .....	<b>27</b>
4-1. Error modes .....	27
4-2. Corrective actions for each error code .....	32
<b>5. PCB diagram</b> .....	<b>37</b>
5-1. Main PCB .....	37
5-2. Circuit diagrams of main parts .....	38
5-3. Sub PCB - best ( LCD ) .....	39
Sub PCB - better ( GRAPHIC ) .....	39
5-4. Detailed descriptions of contact terminals (Sub PCB) - best (WF1124*A*) .....	40
Detailed descriptions of contact terminals (Sub PCB) - better (WF1124*B*) .....	40
<b>6. Wiring diagram</b> .....	<b>41</b>
6-1. Wiring diagram .....	41
<b>7. Schematic diagram</b> .....	<b>42</b>
7-1. Main control .....	42
7-2. Sub control .....	43
<b>8. Reference</b> .....	<b>44</b>
8-1. ARNO Project name .....	44

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# 1. SAFETY INSTRUCTIONS

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## 1-1. SAFETY INSTRUCTIONS FOR SERVICE ENGINEERS

- ▶ Make sure to observe the following instructions to operate the product correctly and safely and prevent possible accidents and hazards while servicing.
- ▶ Two types of safety symbols, Warning and Caution, are used in the safety instructions.



**WARNING**

Hazards or unsafe practices that may result in severe personal injury or death.



**CAUTION**

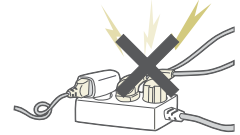
Hazards or unsafe practices that may result in minor personal injury or property damage.



**WARNING**

**BEFORE SERVICING**

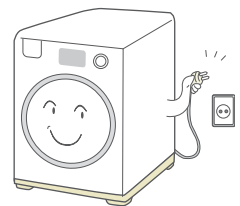
- (When servicing electrical parts or harnesses) Make sure to disconnect the power plug before servicing.
  - ✓ Failing to do so may result in a risk of electric shock.
- Do not allow consumers to connect several appliances to a single power outlet at the same time.
  - ✓ There is a risk of fire due to overheating.



- When removing the power cord, make sure to hold the power plug when pulling the plug from the outlet.
  - ✓ Failing to do so may damage the plug and result in fire or electric shock.



- When the washing machine is not being used, make sure to disconnect the power plug from the power outlet.
  - ✓ Failing to do so may result in result in accidental operation of the washing machine.



- Do not place or use gasoline, thinners, alcohol, or other flammable or explosive substances near the washing machine.
  - ✓ There is a risk of explosion and fire caused from electric sparks.

**WARNING****WHILE SERVICING**

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- Check if the power plug and outlet are damaged, flattened, cut or otherwise degraded.
    - ✓ If faulty, replace it immediately.  
Failing to do so may result in electric shock or fire.
  - Completely remove any dust or foreign material from the housing, wiring and connection parts.
    - ✓ This will prevent a risk of fire due to tracking and shorts in advance.
  - When connecting wires, make sure to connect them using the relevant connectors and check that they are completely connected.
    - ✓ Do not use tape instead of the connectors, it may cause fire due to tracking.
  - Make sure to discharge the PBA power terminals before starting the service.
    - ✓ Failing to do so may result in a high voltage electric shock.
  - When replacing the heater, make sure to fasten the nut after ensuring that it is inserted into the bracket-heater.
    - ✓ If not inserted into the bracket-heater, it touches the drum and causes noise and electric leakage.
- 

**WARNING****AFTER SERVICING**

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- Check the wiring.
    - ✓ Ensure that the wiring can not be damaged by any sharp edges or moving parts.
  - Check for any water leakage.
    - ✓ Perform a test run for the washing machine using the standard course and check whether there is any water leakage through the floor section or the pipes.
  - Do not allow consumers to repair or service any part of the washing machine themselves.
    - ✓ This may result in personal injury and shorten the product lifetime.
- 



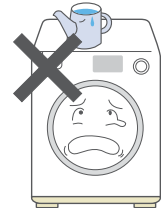
**CAUTION****BEFORE SERVICING**

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- Do not sprinkle water onto the washing machine directly when cleaning it.
  - ✓ This may result in electric shock or fire, and may shorten the product lifetime.



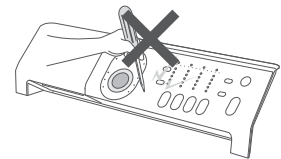
- Do not place any containers with water on the washing machine.
  - ✓ If the water is spilled, it may result in electric shock or fire. This will also shorten the product lifetime.



- Do not install the washing machine in a location exposed to snow or rain.
  - ✓ This may result in electric shock or fire, and shorten the product lifetime.



- Do not press a control button using a sharp tool or object.
  - ✓ This may result in electric shock or damage to the product.

**CAUTION****WHILE SERVICING**

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- When wiring a harness, make sure to seal it completely so no liquid can enter.
  - ✓ Take care when disconnecting connectors, do not use excessive force as this may damage the connector.

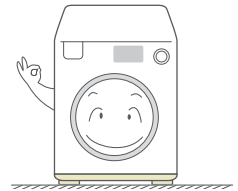
- Check if there is any residue that shows that liquid entered the electric parts or harnesses.
  - ✓ If any liquid has entered into a part, replace it or completely remove any remaining moisture from it.

- If you need to place the washing machine on its back for servicing purposes, place a support(s) on the floor and lay it down carefully so its side is on the floor.
    - ✓ Do not lay it down on its front. This may result in the inside tub damaging parts.
-

**CAUTION****AFTER SERVICING**

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- Ensure that all components are reassembled correctly and are safe before connecting the appliance to the mains supplies.
- 
- Check the insulation resistance.
    - ✓ Disconnect the power cord from the power outlet and measure the insulation resistance between the power plug and the grounding wire of the washing machine. The value must be greater than 10M $\Omega$  when measured with a 500V DC Megger
- 
- Check whether the washing machine is level in relationship with the floor. Check whether it is installed firmly on the floor.
    - ✓ Vibrations can shorten the lifetime of the product.



## 2. FEATURES AND SPECIFICATIONS

### 2-1. FEATURES

#### ■ COMMON FEATURES




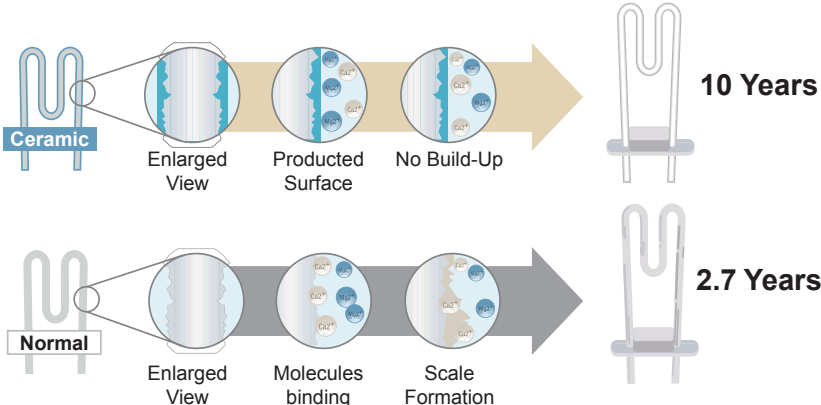
Features	Description
<p><b>“12kg” Biggest Capacity in Standard Size</b></p>	<p>“12kg” is the Biggest Capacity in Standard Size</p> <ul style="list-style-type: none"> <li>The benefits for customers have been greatly increased due to the efficient use of limited space.</li> <li>Usability has been improved due to the easier loading and removing of the laundry.</li> </ul> <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 20px;"> <ul style="list-style-type: none"> <li>- Time saving &amp; Less efforts</li> <li>- Energy &amp; Money saving</li> <li>- Better, Thorough Cleaning</li> </ul> </div> </div>
<p><b>Most Efficient</b></p>	<ul style="list-style-type: none"> <li>This model offers more efficient energy use compared to standard A rated machine with the special Bubble generator system and Samsung BLDC motor. <ul style="list-style-type: none"> <li>Eco Bubble tech.</li> <li>High efficiency BLDC motor</li> </ul> </li> </ul>
<p><b>Bubble Wash Technology</b></p>	<ul style="list-style-type: none"> <li>Bubble Wash technology activates the detergent solution from the start of the wash and generates bubbles through the Bubble Generator so that the detergent dissolves more quickly and the detergent bubbles generated at the start of the wash penetrate the fabric of the laundry faster and more effectively than a conventional wash guaranteeing a cleaner wash. In particular, the lower the water temperature is, the better the effect. In addition, since washing is performed after the detergent is completely dissolved in the water, there is no need to worry about any remaining detergent residue.</li> <li>Using a Samsung washing machine, you can wash waterproof clothing without worrying about damage to material not previously washable. The outdoor care course of a Samsung washing machine provides an excellent wash performance and fabric care level by minimizing damage to the waterproof material.</li> </ul> <div style="text-align: center; margin-top: 20px;">  </div>

Features	Description
<p><b>3.5" Color LCD</b></p>	<ul style="list-style-type: none"> <li>LCD display control panel is clear and easy to use for minimum fuss and hassle. And while it is easy to operate, the Display enables you to make quick and accurate adjustments to your wash for excellent washing results.</li> </ul> <div data-bbox="616 416 1318 674" data-label="Image"> </div> <p data-bbox="831 678 1099 707" style="text-align: center;"><b>3.5" Color LCD Display</b></p>
<p><b>VRT™ Technology</b></p>	<ul style="list-style-type: none"> <li>This Samsung washer performs very quietly minimizing noise and vibration with 3D vibration sensors and smart control technology, which enables it to maintain the lowest possible vibration. Thus, the drum keeps perfect balance.</li> </ul> <div data-bbox="544 920 1430 1160" data-label="Diagram"> </div> <p data-bbox="922 1173 1043 1202" style="text-align: center;">"2nd VRT "</p>
<p><b>Eco Drum Clean</b></p>	<ul style="list-style-type: none"> <li>Using Eco Drum Clean helps to keep your washing machine clean even without any chemical detergent or bleach. Keep your drum cleansed and odourless with this specialised cleaning program.</li> </ul> <div data-bbox="746 1379 1187 1704" data-label="Image"> </div>



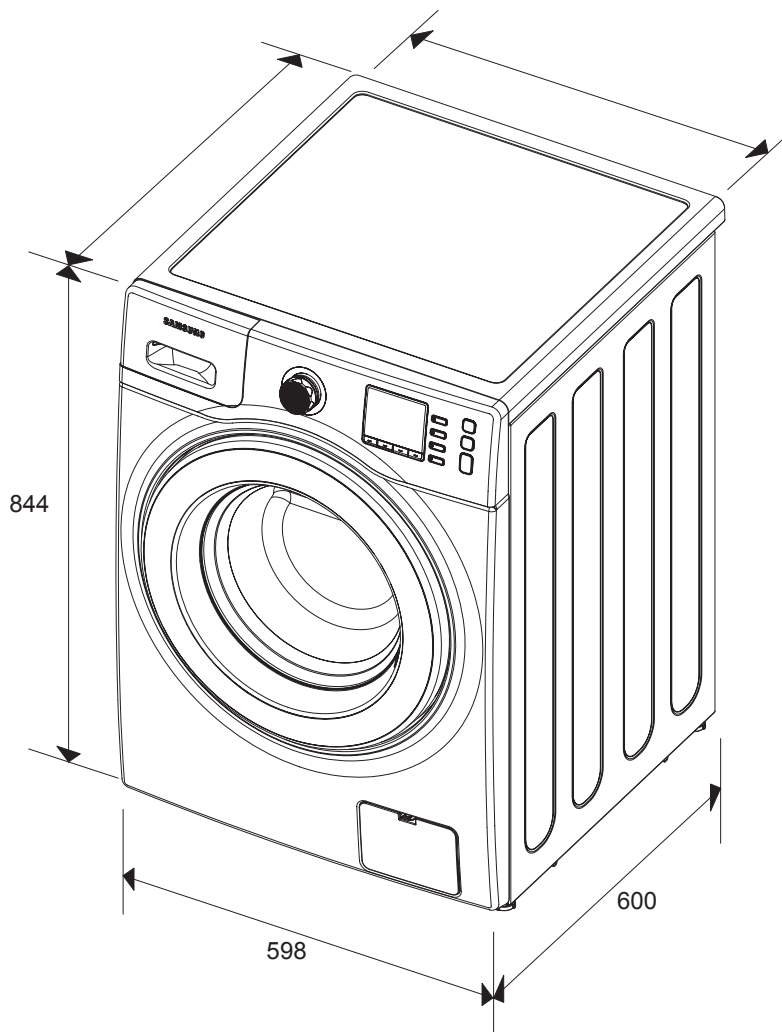
## OPTIONAL FEATURES

► The features below depend on the model.

Features	Description
<p><b>Water Safety System</b></p>	<ul style="list-style-type: none"> <li>• The Water Safety System was invented for perfect leakage protection. The double safety valve connects directly to the water tap. In the event of a leakage, the built-in sensor immediately detects the leak within a few short seconds, automatically turning off both the water supply and the washing machine.</li> <li>- Inlet hose It is attached to the water supply hose and automatically cuts off the water supply if the hose is damaged. It also displays a warning indicator.</li> <li>- Leakage Sensor A water leakage sensor attached at the bottom of the washing machine to cutoff the power automatically if a leakage occurs.</li> </ul>   
<p><b>Ceramic Heater</b></p>	<ul style="list-style-type: none"> <li>• The ceramic heater in Samsung washing machine prevents metals in hard water from being attach to the heater, which may cause a reduction in heater efficiency. It saves energy, time and costs.</li> <li>- Energy Savings Over time, conventional heaters increase their power consumption an average of 5.8 percent, while ceramic heaters only become 1.8 percent less efficient.</li> <li>- Time Savings After three years, conventional heaters take 7.5 percent longer to heat up, whereas ceramic only lose 2.5 percent longer to heat up, whereas ceramic only lose 2.5 percent of their ability to heat up.</li> </ul> 

## 2-2. SPECIFICATIONS

Model		WF1114*
Wash Type		FRONT LOADING TYPE
Dimension		W 598mm X D 600mm X H 844mm
Water Pressure		50kPa ~ 800kPa
Water Volume		16304l/annual
Weight		71kg
Wash & Spin Capacity		12.0kg
Power Consumption	WASHING	220V / 150W
		240V / 150W
	WASHING and HEATING	220V / 2000W
		240V / 2400W
Spin Revolution	rpm	1400




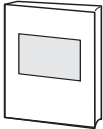
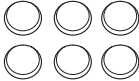

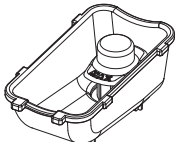


## 2-3. COMPARING SPECIFICATIONS WITH EXISTING MODELS

(★) : Functions may be different depending on the model.

Grade		ARNO	SCOUT
Model Name		WF1114*	WF0804*/WF0802* WF0704*/WF0702*
Image			
Feature		2nd Diamond Drum "12kg" Biggest Capacity	Diamond drum Big door design
Capacity		12Kg	8.0kg / 7.0kg
Main Spec	Drum Volume	78ℓ	63 ℓ / 49 ℓ
	Max rpm	1400	1400 / 1200
	Motor	BLDC	DD
	Control Sys	General	General
	Weight Detection	3 Stages	3 Stages
	Heater Capacity	2000 W / 230 V	2000 W / 230 V
	Water Supply	Cold only / Cold and Hot	Cold only / Cold and Hot
	Drainage	Pump	Pump
	Power-Outage Compensation	Yes	Yes
	Zero Standby Power	Yes (1W or Less)	Yes (1W or Less)
USP	Bubble	Yes (★)	Yes (★)
	Eco Drum Clean	Yes	Yes
	Outdoor Care	Yes (★)	Yes (★)
	Quick Wash	Yes	Yes
	Liquid Detergent Box	Yes (★)	Yes (★)
	Water Safety	Yes (★)	Yes (★)
	Ceramic Heater	Yes (★)	Yes (★)
	Diamond Drum	Yes	Yes
Design	Big Door	Yes (475 mm)	Yes (480 mm)
	Center Jog Dial	Yes	Yes
	Display	3.5" LCD Display/LED Display	LED Display / Dot LED
Dimension (W X D X H mm)		598 x 600 x 844	598 x 600 x 844

## 2-4. OPTIONS SPECIFICATIONS

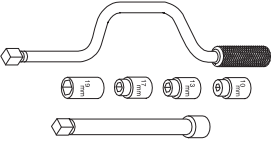
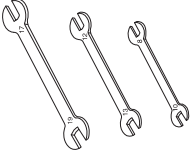

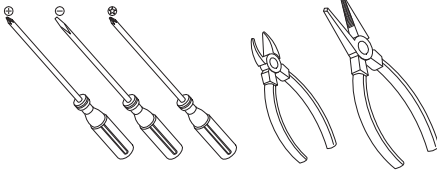
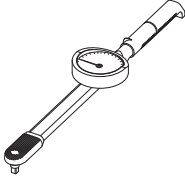
Item		Code	QTY	Remarks
	BOLT-SPANNER	DC60-40146A	1	Default
	HOSE-WATER	DC62-10289B	1 (★ : Cold only) or 2 (★ : Cold and Hot)	For specific models only
	HOSE-WATER (AQUA-STOP)	DC62-00079A	1 (★ : Cold only) or 2 (★ : Cold and Hot)	For specific models only
	MANUAL-BOOK	DC68-03038A	1	WF1124XAC/XEF
				WF1124XBC/XEF
	CAP-FIXER	DC67-00307A	6	Default
	HOSE-HANGER	DC62-10278A	1	Default
	ASSY COVER DRAWER	DC97-16128A	1	Default

 Note

- (★) is supplied for specific models only among those without water supply hoses.
- You can purchase additional water supply and drain hoses from a service center.
- For built-in models, the spanner, water supply and drain hoses are not supplied. Both the water supply and drain hoses are supplied during the installation.



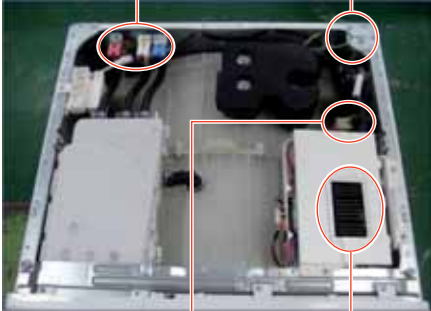
### 3. DISASSEMBLY AND REASSEMBLY





#### 3-1. TOOLS FOR DISASSEMBLY AND REASSEMBLY





Tool	Type	Remarks
	Box driver	10mm Heater(1), Tub(12), Fixer screw(5), Motor(2), Balance(9) 13mm Shock Absorber (2 holes each in left/right), Damper(2), Damper(friction 2) 19mm Pulley(1)
	Double-ended spanner	10mm Replaced by box driver 13mm Leg 19mm
	Vice pliers	A Tool for protecting empty turning of bolt or abrasion from using box driver For disassembly of Spin drum
	Others (screwdriver, nipper, long nose pliers)	Common tools for servicing
	Torque wrench	The Tool for assembly of heater and Tub

### 3-2. STANDARD DISASSEMBLY DRAWINGS





- ▶ This is a standard disassembly diagram and may differ from the actual product. Use this material as a reference when disassembling and reassembling the product.


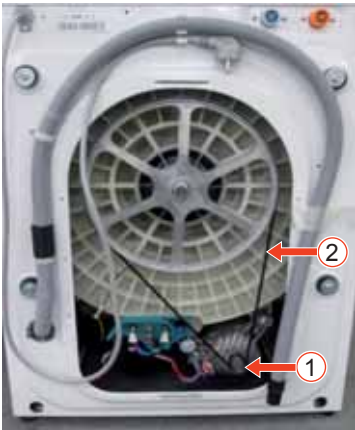


Part	Figure	Description
<p><b>Assy Cover Top</b></p>		<p>1. Remove the two screws holding the Top Cover at the back of the unit.</p>
		<p>2. Remove the top-cover by lifting it up after pulling it back about 15mm.</p>
		<p>3. Then, the Water (Pressure) Sensor, Noise Filter and Water Valve, Main PCB can be replaced.</p>



Part	Figure	Description
Sub-pcb panel		<ol style="list-style-type: none"> <li>1. Remove the 2 screws holding the front operating panel.</li> </ol>
		<ol style="list-style-type: none"> <li>2. Remove the screws at the top of the ASSY-PANEL CONTROL.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Hold the ASSY-PANEL CONTROL while pulling it upwards and release the hook to remove it.</li> <li>4. Disconnect the 3 terminals connected to the PCB by hand.</li> </ol>
		<ol style="list-style-type: none"> <li>5. Remove the four screws holding the PCB and release the hooks on both sides to remove the PCB for repair / replacement.</li> </ol>

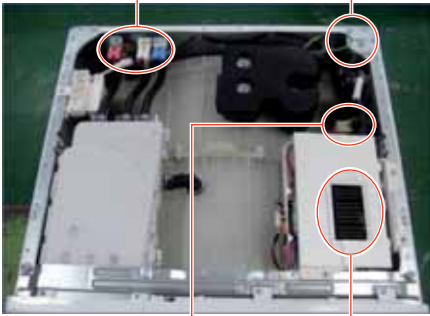


Part	Figure	Description
<b>Assy Housing-drawer</b>		<p>1. Remove this screw.</p>
		<p>2. Remove the Band-ring.</p>
		<p>3. Separate the water supply valve wire.</p>
		<p>4. Remove the screws holding the water supply valve.</p>









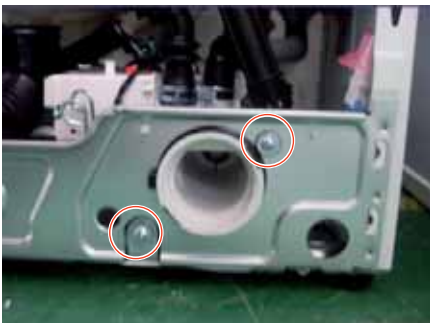

Part	Figure	Description
		<ol style="list-style-type: none"> <li>1. Using long nose pliers, pick up one of the rings on Wire-Diaphragm which connect the spring and the wire ends. then Separate the Wire-Diaphragm from the Front-Frame and Disconnect the Diaphragm.</li> </ol>
Frame Front		<ol style="list-style-type: none"> <li>2. Remove the two screws holding the FRAME-FRONT.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Remove the screws holding the bottom of the FRAME-FRONT.</li> </ol>
		<ol style="list-style-type: none"> <li>4. Disconnect the terminal for the DOOR-LOCK switch.</li> </ol>




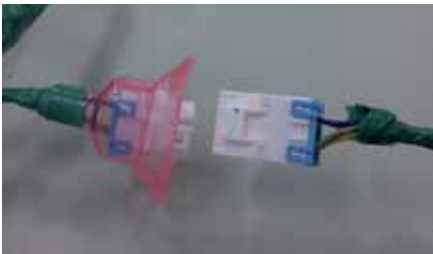
Part	Figure	Description
Cover-Back		<ul style="list-style-type: none"> <li>Unfasten the 4 screws that hold the back cover in place. Remove the back cover by sliding it down. (When assembling, slide the back cover up.)</li> </ul>
Belt		<ol style="list-style-type: none"> <li>Remove the Cover back .</li> <li>Separate the belt and then assembly it.</li> <li>Check if the belt position is at the center of the Pulley.</li> </ol> <p><input checked="" type="checkbox"/> Assembling the belt Place the belt around the Motor-Pulley (①) and then over the Pulley (②).</p>
DD Motor		<ol style="list-style-type: none"> <li>Separate the Wire Housing from the motor.</li> <li>Remove the bolts holding the motor at the back of the washing machine.</li> <li>Separate the motor.</li> </ol>
		<p><b>⚠ Caution</b> When installing the Belt around the Motor Pulley, the bottom of the belt must be located on the second tooth of the motor pulley of the Motor Pulley.</p>

Part	Figure	Description
Water supply valve	 A close-up photograph showing a hand in a red glove using a blue wire cutter to disconnect a black wire from a terminal block. The terminal block is mounted on a white plastic housing. Other wires are visible in the background.	<ol style="list-style-type: none"><li>1. Separate the Assy-Cover Top.</li><li>2. Separate the water supply valve wire.</li></ol>
	 A photograph of the front panel of a white appliance, likely a washing machine. The water supply valve is visible, featuring a green handle on the left and an orange handle on the right. Five screws are highlighted with red circles: two on the left side of the valve and three on the right side.	<ol style="list-style-type: none"><li>3. Remove the screws holding the water supply valve.</li></ol>






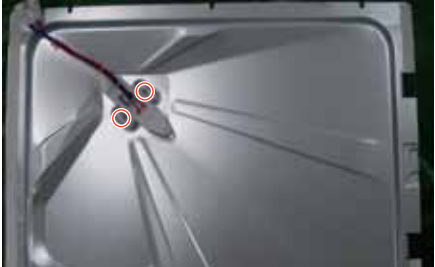
Part	Figure	Description
<b>Water level sensor</b>	 <p>Water valve</p> <p>Noise filter</p> <p>Sensor pressure</p> <p>Main PCB</p>	<ol style="list-style-type: none"> <li>1. Separate the Assy Top-Cover.</li> </ol>
		<ol style="list-style-type: none"> <li>2. Disconnect the wire between the PRESSURE HOSE and the water level sensor for repair / replacement.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Push the clip of the water level sensor behind sensor to one side of the frame and pull it out to remove it.</li> </ol>

Part	Figure	Description
Door-hinge		<p>1. Remove the 2 screws holding the Door Hinge and separate the door.</p>
		<p>2. Remove the 9 screws holding the Holder Glass and separate the Holder Glass.</p>
		<p>3. Remove the 4 screws holding the bracket hinge and replace the door-hinge.</p>







Part	Figure	Description
Drain pump		<ol style="list-style-type: none"> <li>1. Remove the Frame Front.</li> </ol>
		<ol style="list-style-type: none"> <li>2. Remove the remaining water through the drainage hose. <ul style="list-style-type: none"> <li>☑ Place a bowl under the drainage hose, hose to catch any water that may flow out.</li> </ul> </li> </ol>
		<ol style="list-style-type: none"> <li>3. Separate the Drain Filter by turning it counterclockwise. <ul style="list-style-type: none"> <li>☑ Since the remaining water may flow out, place a bowl underneath it when separating the filter.</li> </ul> </li> </ol>
		<ol style="list-style-type: none"> <li>4. Remove the 2 screws holding the drain pump.</li> </ol>
		<ol style="list-style-type: none"> <li>5. Disconnect the terminal and Holder.</li> </ol>

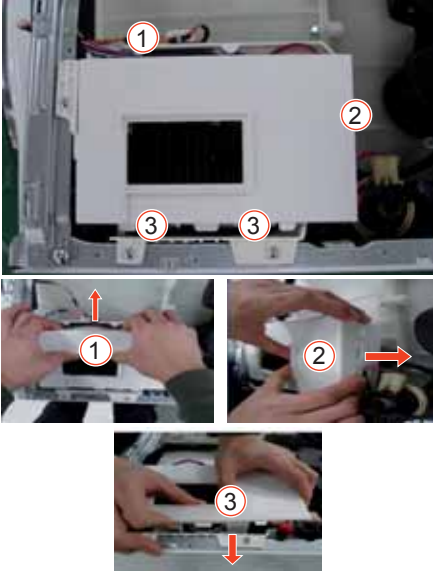
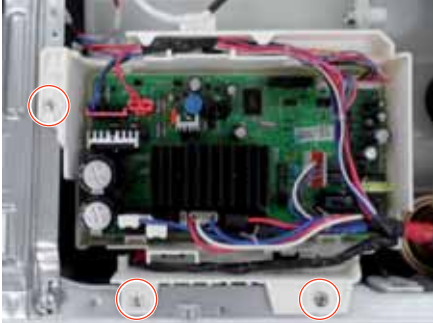


Part	Figure	Description
Drain pump		<p>6. Remove the holder by using a long nose pliers.</p> <p><input checked="" type="checkbox"/> Do not cut off the holder</p>
		<p>7. Release the BAND RING (3EA) and remove the HOSE (3EA).</p>
		<p>8. Push the TUB inward slightly to remove the PUMP.</p>
		<p><input checked="" type="checkbox"/> Pump wire harness is connected to main wire harness.</p>
	<p><input checked="" type="checkbox"/> Check Points for Troubleshooting</p> <ol style="list-style-type: none"> <li>1. Separate the Drain Filter and check if any alien substances are inside the pump (e.g. coins, buttons ..., etc.) → Remove these if found.</li> <li>2. Check if the wire driving the pump has come loose → Take the relevant countermeasure if necessary.</li> <li>3. When water leaks, check the assembly status of the Clamp Hose, and Cap Drain → Take the relevant countermeasure if necessary. Turn the filter counterclockwise to remove the remaining water.</li> </ol>	



Part	Figure	Description
Door-lock S/W		<p>1. Open the Door. Remove the Wire Diaphragm and remove it from The Front Frame.</p> <ul style="list-style-type: none"> <li>☑ For easier disassembly, remove the spring from the lower part of the Diaphragm with a (-) screwdriver.</li> <li>☑ Since the Diaphragm can be damaged when removing it. Use a Longnose plier and remove it slowly in one direction.</li> </ul>
		<p>2. Remove the 2 screws.</p>
		<p>3. Remove the screw holding the Door-Lock S/W. Remove the Door-Lock S/W. Remove the connection wire. (Remove the connector after releasing it by pressing the catch.)</p>
Leakage Sensor (OPTION)		<p>1. Disconnect two wire connectors.</p>
		<p>2. Remove the six screws holding the bottom of the FRAME-FRONT.</p>
		<p>3. Remove the 2 screws.</p>



Part	Figure	Description
Heater		<p>1. Separate the Back Cover.</p>
		<p>2. Separate the Connection Housing (3). 3. Remove the screw (1).</p>
		<p>4. Separate the Holder and Connection Housing.</p>
		<p>5. Remove the nut holding the heater and separate the Heater. ☑ Use box Drivers (Socket size: 10mm)</p>
		<p>6. Remove the Heater from the Tub.</p> <p>⚠ <b>Caution</b></p> <p>Make sure to insert the Heater into the correct position of the bracket inside the Tub when reassembling it. Otherwise, there is a danger of a fire.</p>  <p>Make sure to push it inwards until the packing part comes into the Tub completely when reassembling it so that the packing part is completely stuck to the Tub. Fasten the holding nut with a force of 5Kgf/cm<sup>2</sup>. If the nut is not fastened properly, there is a danger of water leaking.</p>

Part	Figure	Description
Assy PCB Main		<ol style="list-style-type: none"> <li>1. Remove the Top cover.</li> <li>2. Remove the cover PCB - remove the hook in order ① → ② → ③ ☑ Push the hook indicated direction</li> <li>3. Remove the wire harness connector which is connected to the PCB.</li> </ol>
		<ol style="list-style-type: none"> <li>4. Remove the screws that hold the main PCB in place.</li> </ol>
		<ol style="list-style-type: none"> <li>5. Remove the holder by using a long nose Pliers. ☑ Do not cut off the holder</li> </ol>
		<ol style="list-style-type: none"> <li>6. Replace the main PCB. You cannot remove the PCB separately because urethane is used for water proofing.</li> </ol>

Part	Figure	Description
Replacement of the main PCB		<ul style="list-style-type: none"> <li>✓ Check Points for Troubleshooting</li> <li>1. Check whether there is any error in applying the power.</li> <li>2. Check the voltage between the DC 5V and GND terminals.</li> <li>3. If an error occurs when there is no characteristic error in the electric harnesses, check these points:               <ul style="list-style-type: none"> <li>3E error: The resistance of motor(U-V/V-W/W-U) is 4.8 Ω</li> <li>HE/HE1 error: The resistance of heater(for 2000W unit) is 25.19 to 27.84 Ω</li> <li>DE1 error: The resistance of door switch is 500 to 1,500 Ω</li> <li>HE/HE1 error: The resistance of thermostat is 0 Ω</li> <li>5E error: The resistance of drain motor is 148.5 to 181.5 Ω</li> <li>4E error: The resistance of water valve is 4.4 kΩ</li> </ul> </li> </ul>

 Reassembly is in the reverse order of the removal.

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# MEMO

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## 4. TROUBLESHOOTING

### 4-1. ERROR MODES

► This is a washer integrated error mode. For detailed information, refer to the general repair scripts.

Error Type	Drum			Fully automatic	Causes	Remarks
	Error mode	Old error mode	For USA			
Water Level Sensor	1E	1E E7	LE	1E	<ul style="list-style-type: none"> <li>- The part of the hose where the water level sensor is located is damaged (punctured).</li> <li>- The hose is clogged with foreign material.</li> <li>- The hose is folded.</li> <li>- Too much lubricant has been applied to the insertion part of the air hose.</li> <li>- Hose engagement error (disengaged)</li> <li>- Part fault (Faulty internal soldering)</li> <li>- The water level sensor terminal is disengaged.</li> <li>- Main PBA fault.</li> </ul>	
Motor Driving Error and Hall Sensor Error	3E	3E EA EB 8E	3E	3E	<ul style="list-style-type: none"> <li>- The PBA connector terminal is not connected.</li> <li>- The motor spin net is not engaged.</li> <li>- The motor's internal coil is damaged (short-circuited or cut)</li> <li>- The hall sensor terminal is not connected.</li> <li>- Foreign material (a screw) has entered the motor.</li> </ul>	For USA products, this error occurs because of restrained revolutions
	3E1	3E1	E3		<ul style="list-style-type: none"> <li>- Motor overloaded due to too much laundry (Non-sensing)</li> <li>- The motor hall sensor terminal is not connected.</li> <li>- PBA fault</li> </ul>	For USA products, this error occurs when an interference is generated due to too much laundry, etc.
	3E2	3E2			bE	<ul style="list-style-type: none"> <li>- The motor driving error from the PBA is weak. : Unstable relay operation, etc.</li> </ul>
	3E3	3E3	<ul style="list-style-type: none"> <li>- This occurs due to erroneous operating signals for the motor hall sensor.</li> <li>- The IPM terminal of the main PBA is not connected.</li> <li>- The DD motor cover is out of place.</li> </ul>			
	3E4	3E4	<ul style="list-style-type: none"> <li>- The PCB housing terminal is not connected.</li> <li>- PBA fault</li> <li>- DD motor fault</li> </ul>			
Water Supply Error	4E	4E E1	nF	4E	<ul style="list-style-type: none"> <li>- Foreign material is entering the water supply valve.</li> <li>- The water supply valve terminal is not connected. (Wire disconnected)</li> <li>- The warm water and rinse connectors are wrongly connected to each other.</li> <li>- This occurs if the PCB terminal from the drain hose to the detergent drawer is not connected. Check whether the transparent hose is folded or torn.</li> </ul>	If this error occurs in the Wool course
	4E1	4Ed	-		<ul style="list-style-type: none"> <li>- The cold and warm water supply hoses are wrongly engaged into each other.</li> <li>- The temperature of the water supplied through the dry valve during a dry cycle is sensed as higher than 70 °C.</li> </ul>	The water supplied for 1 minute drying the drying cycle is 0.3 ~ 0.4 L.
	4E2	E8	-		<ul style="list-style-type: none"> <li>- The water temperature is sensed as higher than 50 °C in the Wool or Lingerie courses.</li> </ul>	

Error Type	Drum			Fully automatic	Causes	Remarks
	Error mode	Old error mode	For USA			
Drain Error	5E	5E E5	nd	5E	<ul style="list-style-type: none"> <li>- The pump motor impeller is damaged internally.</li> <li>- The wrong voltage (220 V → 110 V) is supplied to the parts.</li> <li>- Part fault</li> <li>- This occurs due to freezing in the winter season</li> <li>- The drain hose is clogged. (Injection error, foreign material)</li> <li>- Clogged with foreign material</li> <li>- The water pump terminal is not connected: rubber band, bills, cotton, hair pins, coins</li> </ul>	
Power Error	9E1 Uc	PH1	2E	-	<ul style="list-style-type: none"> <li>- Check the consumer's power conditions. <ul style="list-style-type: none"> <li>: Make sure to check the operating voltage. Connect a tester to the internal power terminals during the Boil or Dry operations and observe the washing machine's operation carefully.</li> <li>: Check the voltages. (An error occurs when under or over voltage is supplied.)</li> <li>: Check whether a plug receptacle is used. When the connecting wire is 1m, a momentary low voltage may drop up to 10 V</li> </ul> </li> <li>- Main PBA fault (sometimes)</li> </ul>	For Full Automated products, no error code is displayed for a power error.
	9E2	Plo			<ul style="list-style-type: none"> <li>- This error is not a fault but occurs during a momentary power failure <ul style="list-style-type: none"> <li>: If started again when this error code is displayed, the operation restarts from the cycle that was stopped due to the power failure.</li> <li>: If the washing machine is not operating and this error code is displayed, it is displayed to notify that a power failure has occurred.</li> </ul> </li> </ul>	
			PF			
Communication Error	AE	13E	-	-	<ul style="list-style-type: none"> <li>- The signals between the sub and main PBAs are not sensed because of a communications error.</li> <li>- Check the connector connections between the sub and main PBAs carefully. → Check for incorrect or loose connections, etc.</li> <li>- Remove the sub PBA C/Panel and check for any faulty soldering.</li> </ul>	
Switch Error (Main Relay Error)	bE1	12E	E2	-	<ul style="list-style-type: none"> <li>- The Power button is pressed continually (for more than 12 seconds).</li> <li>- The switch is pressed unevenly because of a deformation of the control panel.</li> <li>- This error may occur when the screws that hold the sub PBA in place are tightened too much.</li> </ul>	
	bE2	14E			<ul style="list-style-type: none"> <li>- A button other than the Power button is continually pressed (for more than 30 seconds).</li> <li>- Deformation of an internal plastic injection part</li> <li>- A screw for assembling the sub PBA is tightened too much.</li> </ul>	
	bE3	18E	Sr		<ul style="list-style-type: none"> <li>- The main relay of the PBA is short-circuited.</li> <li>- The main relay terminal is connected incorrectly. (The terminal is bent and contact cannot be made.)</li> </ul>	When the PBA motor relay does not operate

Error Type	Drum			Fully automatic	Causes	Remarks	
	Error mode	Old error mode	For USA				
Cooling Error	CE	CE cE	-	-	<ul style="list-style-type: none"> <li>- This occurs when the temperature of the washing machine is more than 50 °C and no draining is performed. (Reason: If hot water comes into contact with skin, it may cause burns.)</li> <li>- This occurs when the water temperature, for a specific course, exceeds 50 °C. In that case, the water will be drained to the Reset level.</li> <li>- This represents a thermal sensor error or any misuse of the unit.</li> </ul>	If this error occurs for another reason, it is due to a washing heater sensor fault. Replace it.	
Door Error	dE door	dE Ed door	dS (Before operation)	dE	<ul style="list-style-type: none"> <li>- A switch contact error because of a deformation of the door hook</li> <li>- When the door is pulled by force</li> </ul>	When the door is not opened after the door open operation	
			dL (During operation)				<ul style="list-style-type: none"> <li>- This occurs in the Boil wash because the door is pushed due to a pressure difference from internal temperature changes</li> </ul>
	dE1	dE1	LO (Unlock Fail)	-	<ul style="list-style-type: none"> <li>- The door lock switch terminal is connected incorrectly.</li> <li>- The door lock switch terminal is broken.</li> <li>- This occurs intermittently because of an electric wire leakage</li> <li>- Main PCB fault</li> </ul>		
			FL (Lock Fail)				
dE2	dE2	-	-	<ul style="list-style-type: none"> <li>- This occurs if the Power switch is turned on/off continually and too much heat is generated (This error is difficult to be reproduced.)</li> </ul>			
Heater Error	HE	HE E5	Hr (Heater Relay)	-	<ul style="list-style-type: none"> <li>- The washing heater is short-circuited or has a wire disconnected.</li> <li>- The washing heater in the tub has an error. (Contact error, temperature sensor fault)</li> <li>- If the water level sensor operates without water because water is frozen or for any other reason and the temperature sensor engaged at the bottom to prevent overheating for the washing heater detects a temperature of 100 to 150 °C, the washing machine turns the input power off.</li> </ul>	For USA products, if the heater has no error, this occurs because of a PBA relay malfunction.	
	HE1	HE1 E1 Ec					
	HE2	HE2				<ul style="list-style-type: none"> <li>- This error occurs when the red temperature sensor at the center of the dry heater operates (at a temperature higher than 145 °C) : Corrective action – Press the button at the center lightly. The washing machine will operate normally. Alternatively, replace the temperature sensor if the temperature sensing is unstable because of functional degradation.</li> </ul>	
	HE3	-				<ul style="list-style-type: none"> <li>- This occurs when the steam function does not operate normally.</li> <li>- This error does not occur in existing drum products. Check whether the product is a steam model</li> </ul>	




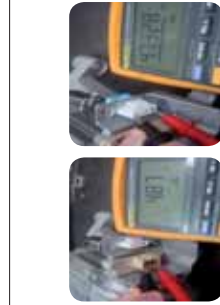

Error Type	Drum			Fully automatic	Causes	Remarks
	Error mode	Old error mode	For USA			
<b>Water Leakage Error</b>	LE LE1	11E E9	LE	LE	<ul style="list-style-type: none"> <li>- Heater engagement fault (out of place)</li> <li>- The air hose is out of place and water leakage occurs during the spin cycle.</li> <li>- The tub back at the safety bolts fixing part is broken.</li> <li>- Water leakage occurs at the front with foaming because of too much detergent</li> <li>- Water leakage occurs because the connecting hose to the detergent drawer is connected incorrectly.</li> <li>- The drain pump filter cover is engaged incorrectly.</li> <li>- Water leakage occurs at the drain hose.</li> <li>- The duct condensing holding screws are worn.</li> <li>- The nozzle-diaphragm is engaged in the opposite direction or the rubber packaging is omitted.</li> <li>- Water leakage occurs because the screws that hold the tub back and front in place are fastened incorrectly.</li> <li>- The leakage sensor is faulty.</li> </ul>	
<b>Overflow Error</b>	OE OF	OE OF E3	OE	-	<ul style="list-style-type: none"> <li>- Water is supplied continually because the water level detection does not work.</li> <li>- Because the drain hose is clogged and there is an injection error (at a narrow section), the water level detection does not work and water is supplied continually.</li> <li>- Water is supplied continually because of freezing or because there is foreign material in the water supply valve.</li> <li>- This error may occur when the water level sensor is degraded.</li> </ul>	For USA products, this error occurs because the water level sensor terminal is out of place.
<b>Temperature Sensor Error</b>	tE1	tE1 6E	tE	-	<ul style="list-style-type: none"> <li>- The washing heater in the tub has an error. (Contact error, temperature sensor fault)</li> <li>- The connector is connected incorrectly or is disconnected.</li> <li>- If the water level sensor operates without water because the water is frozen or for any other reason and the temperature sensor engaged at the bottom to prevent overheating for the washing heater detects a temperature of 100 to 150 °C, the washing machine turns the input power off.</li> </ul>	Heater sensor fault : When the connector is connected incorrectly or has a wire disconnected or contact error
	tE2	tE2	-	-	<ul style="list-style-type: none"> <li>- The temperature sensor for the duct assy fan housing is faulty. (A sensor fault such as an internal short-circuit or wire disconnection)</li> <li>- The connector is out of place or has a contact error.</li> </ul>	Duct condensing temperature sensor fault (for models before the silver nano function was applied)
	tE3	tE3	-	-	<ul style="list-style-type: none"> <li>- This occurs when the duct condensing temperature sensor is open.</li> <li>- This occurs when the duct condensing temperature sensor has a wire disconnected or is short-circuited.</li> <li>- The connector is out of place or has a contact error.</li> </ul>	Dry heater temperature sensor fault (for models before the silver nano function was applied)
<b>Unbalance Error</b>	UE	UE E4	dc	UE	<ul style="list-style-type: none"> <li>- As laundry causes this error, check the laundry.</li> <li>- Find the reason for the unbalance and solve it as directed in the user manual.</li> </ul>	





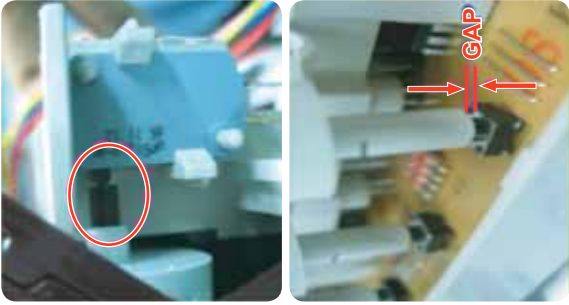

Error Type	Drum			Fully automatic	Causes	Remarks
	Error mode	Old error mode	For USA			
<b>Foaming Detected</b>	Sud	-	SUdS	-	- This occurs when too much foaming is detected. It is also displayed while foaming is removed. When the removal is finished, the normal cycle proceeds. "Sud" or "SUdS" is displayed when too much foaming is detected and "End" is displayed when the removal of the foaming is finished. (This is one of the normal operations. It is an error for preventing non-sensing faults.)	
<b>Mems PBA Error Detected</b>	8E	-	E8	-	- Error detected in the Mems PBA or data error detected. Check the wire connections. Replace if necessary. 1. Check the wire connections. 2. Replace the Mems PBA. 3. Main PBA wire connection error or PBA's silver nano part malfunction. Replace if necessary.	





## 4-2. CORRECTIVE ACTIONS FOR EACH ERROR CODE



▶ These are common troubleshooting procedures for each drum-type washer error mode. For detailed information, refer to the general repair scripts.

Error Type	Error Mode	Causes	Corrective Actions	Description of Photo
Water Level Sensor	1E	<ul style="list-style-type: none"> <li>Water level sensor fault</li> <li>Incorrect connections of the water level sensor terminal</li> <li>The hose part for the water level sensor is folded.</li> <li>Main PCB fault</li> </ul>	<ul style="list-style-type: none"> <li>Check the water level sensor connections and contacts.</li> <li>An error occurs if an incorrect water level sensor is used. Make sure to check the material code. (Abnormal operation)</li> <li>If the water level sensor is faulty, replace it.</li> <li>If the error persists despite taking the action above, replace the PBA.</li> </ul>	 <ul style="list-style-type: none"> <li>Check the water level sensor frequency.</li> <li>Check it after the water level sensor and the connector are connected.</li> <li>Frequency: Approx. 26.1 KHZ with no load</li> </ul>
Washing Motor Error and Hall Sensor Error	3E 3E1 3E2 3E3 3E4	<ul style="list-style-type: none"> <li>Washing motor fault</li> <li>Washing motor hall sensor fault</li> <li>Incorrect connections of the washing motor/hall sensor connector</li> <li>Washing motor rotor and stator fault</li> <li>Main PCB fault</li> </ul>	<ul style="list-style-type: none"> <li>Check the motor connector terminal connections and contacts.</li> <li>3E1 is displayed because overloading occurs due to too much laundry.</li> <li>If the hall sensor terminal is faulty, replace the hall sensor.</li> <li>Check whether the stator of the motor cover is damaged.</li> <li>Check for coil disconnections due to foreign material.</li> <li>If the PBA control circuit is faulty, replace the PBA.</li> </ul>	<p>▶ MAIN PCB</p> <ul style="list-style-type: none"> <li>Check the resistance on the main PCB motor. (Between pins 1 and 3, and 1 and 2 of the three(3) pins)</li> <li>Resistance : Approx. 2 to 5MΩ</li> <li>Check the voltage when the power is on.</li> </ul> <p>▶ Inverter BLDC Motor</p> <ul style="list-style-type: none"> <li>Check the resistance on the Motor Power &amp; Hall Sensor</li> <li>Motor Power Any Terminal 2pin Check 4.8~4.95Φ</li> <li>Hall Sensor <ul style="list-style-type: none"> <li>① Yellow &amp; Red : 7kΩ↓</li> <li>② Yellow &amp; Blue : 7kΩ↓</li> </ul> </li> </ul>    

Error Type	Error Mode	Causes	Corrective Actions	Description of Photo
Water Supply Error	4E 4E1 4E2	<ul style="list-style-type: none"> <li>Water supply valve fault</li> <li>Main PCB fault</li> <li>Freezing in the winter season</li> <li>Check the water supply valve whether only cold model or hot and cold model Incorrected connection can occur an error</li> </ul>	<ul style="list-style-type: none"> <li>If the water supply valve has a wire disconnected, replace it.</li> <li>Check whether the water supply valve is clogged with foreign material and whether water is supplied continually.</li> <li>Check whether no water is supplied because of freezing in the winter season.</li> <li>If the PBA relay operates abnormally, replace the PBA.</li> </ul>	 <ol style="list-style-type: none"> <li>Check the resistance for the water supply valve. Resistance: 4.0 to 5.0 kΩ between the terminals of the water supply valve.</li> <li>Check whether there is foreign material in the water supply valve diaphragm.</li> </ol>
Drain Error	5E	<ul style="list-style-type: none"> <li>Drain pump fault</li> <li>Freezing in the winter season</li> <li>Foreign materials in the drain pump</li> <li>Main PCB fault</li> </ul>	<ul style="list-style-type: none"> <li>Check whether the revolutions of the drain pump motor are restrained by foreign material.</li> <li>Check the same thing for the natural drain process.</li> <li>Check whether the connections are correct and if there is any wires disconnected.</li> <li>If the drain pump operates abnormally intermittently when the temperature of the water in the tub is high.</li> <li>If the motor revolutions are restrained due to freezing in the winter season, check the method to remove the freezing and remove as directed.</li> </ul>	 <p>▲ DRAIN PUMP Resistance: Approximately 155 to 175 Ω between the Terminals for the Water Supply Valve</p>
Communication Error	AE	<ul style="list-style-type: none"> <li>The signals between the sub and main PBAs are not sensed.</li> <li>Incorrect wire connections between the sub and main PBAs.</li> </ul>	<ul style="list-style-type: none"> <li>Check the wire connections and terminal contacts between the sub and main PBAs.</li> <li>Check for disconnected wires.</li> <li>Check whether the sub PBA is short-circuited because of moisture.</li> <li>If the main PBA's communication circuit is faulty, replace it.</li> </ul>	

Error Type	Error Mode	Causes	Corrective Actions	Description of Photo
Switch Error (Main Relay Error)	bE1 bE2 bE3	<ul style="list-style-type: none"> <li>The Power button is continually pressed.</li> <li>A button other than the Power button is continually pressed.</li> <li>Main PCB relay fault</li> </ul>	<ul style="list-style-type: none"> <li>Check whether either the Power switch or a tact switch is continually pressed.</li> <li>Check whether the service PBA holding screws are fastened too much. If they are fastened too much, loosen them a little.</li> <li>If the main PBA switching IC on/off error has occurred, replace the main PBA.</li> <li>The "bE3" error occurs if the main relay connections are incorrect. Check the connections. If there is no error in the connections, replace the main PBA.</li> </ul>	 <p>Check the contact between the control panel buttons and their corresponding tact switch.</p> <ul style="list-style-type: none"> <li>There must be a gap between a control panel button and its corresponding micro switch.</li> <li><input checked="" type="checkbox"/> Otherwise, an error occurs after approx. 30 seconds has passed.</li> </ul>
Cooling Error	CE	<ul style="list-style-type: none"> <li>Washing temperature sensor fault</li> <li>Description of PL hazard prevention</li> </ul>	<ul style="list-style-type: none"> <li>This error occurs if the water temperature is more than 50 °C in draining. Check the temperature.</li> <li>If the water temperature is normal, this error is due to a temperature sensor fault. Replace the washing heater.</li> <li><input checked="" type="checkbox"/> When replacing the washing heater, take care to prevent water leakage.</li> </ul>	 <p>Check the resistance on the Heater. (For faulty features)</p> <p>Check the voltages on the red / blue terminals of the Heater while washing.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Check 25.1275 ~ 27.7725Ω (at 5°C) 11.4518~12.3938kΩ (at 25°C) on both terminals and the voltage of the Heater.</li> </ul>

Error Type	Error Mode	Causes	Corrective Actions	Description of Photo
Door Error	dE dE1 dE2	<ul style="list-style-type: none"> <li>Door switch fault</li> <li>Main PCB fault</li> </ul>	<ul style="list-style-type: none"> <li>If a dE error occurs, check whether it occurs during the Boil cycle.</li> <li>If it is detected that the door is open, close the door.</li> <li>The 220V is directly connected to the door. Check and repair the power wire connections and insulation state.</li> <li>Check the door switch. Replace if faulty.</li> <li>Check the main PBA door sensing circuit. Replace if faulty.</li> <li>Check the drain P pump wire connection.</li> </ul>	<p>▶ TYPE 1 Check the door switch voltage. Check the voltage after the power is on. (That is, check the door switch when the power button is turned on and no operating key is pressed.)</p>  <p>▶ TYPE 2 The resistance of Nos. 3 and 5 of the DOOR LOCK SWITCH must be approximately 1000Ω±50%.</p> 
Heater Error	HE HE1 HE2 HE3	<ul style="list-style-type: none"> <li>Heater fault</li> <li>A fault of the temp sensor located at between the heater terminals</li> <li>Steam function fault</li> <li>Freezing in the winter season</li> </ul>	<ul style="list-style-type: none"> <li>Check if the wire is cut or has a short. if it faulty, Replace it. <ul style="list-style-type: none"> <li>An HE or HE1 error occurs.</li> </ul> </li> <li>Check if the overheating sensor of the dry heater (or air wash heater) is faulty. if it faulty, Replace it. <ul style="list-style-type: none"> <li>An HE2 error occurs.</li> </ul> </li> <li>Check the steam heater. Replace if faulty. <ul style="list-style-type: none"> <li>An HE3 error occurs.</li> </ul> </li> </ul>	<p>Air Wash Heater</p>  <p>Wash Heater</p> 

Error Type	Error Mode	Causes	Corrective Actions	Description of Photo
Water Leakage Error	LE LE1	<ul style="list-style-type: none"> <li>• Check for any leakage.</li> <li>• Foreign material in the DV case</li> <li>• Fault of a hose or incorrect part engagement in the product</li> </ul>	<ul style="list-style-type: none"> <li>• Check for any leakage on the base, Hose, Valve and Tub connections and take any required action.</li> <li>• Check the drain motor operation. Replace if it does not operate normally.</li> </ul>	 <p>Check for any leakage on the base, Hose, Valve and Tub connections.</p>
Overflow Error	OE OF	<ul style="list-style-type: none"> <li>• Water level sensor fault</li> <li>• Freezing in the winter season</li> </ul>	<ul style="list-style-type: none"> <li>• If the water level sensor has a functional error, replace it.</li> <li>• Check the hose. This error occurs if it is torn or has a hole.</li> <li>• This error occurs if water is frozen in the winter season. Check the method to remove freezing and follow as directed.</li> </ul>	 <p>Check the hose connected to the water level sensor.  <input checked="" type="checkbox"/> Check whether the hose is folded, cut, or damaged.</p>
Temperature Sensor Error	tE1 tE2 tE3	<ul style="list-style-type: none"> <li>• Washing temperature sensor fault</li> <li>• Dry temperature sensor fault</li> <li>• Faulty and incorrect connections of the dry condensing sensor</li> <li>• Main PCB fault</li> <li>• Freezing in the winter season</li> </ul>	<ul style="list-style-type: none"> <li>• Check the connections for the washing heater temperature sensor connector.</li> <li>• If the washing heater temperature sensor has a functional error, replace it. <ul style="list-style-type: none"> <li>- A tE1 error occurs.</li> </ul> </li> <li>• Check the connections for the dry heater temperature sensor connector.</li> <li>• If the dry heater temperature sensor has a functional error, replace it. <ul style="list-style-type: none"> <li>- A tE2 error occurs.</li> </ul> </li> <li>• Check the connections for the duct condensing temperature sensor connector.</li> <li>• If the duct condensing temperature sensor has a functional error, replace it. <ul style="list-style-type: none"> <li>- A tE3 error occurs.</li> </ul> </li> </ul>	-
Unbalance Error	UE	<ul style="list-style-type: none"> <li>• Motor hall sensor fault</li> <li>• Caused by the laundry</li> </ul>	<ul style="list-style-type: none"> <li>• Check the type of laundry. Check whether they may cause an unbalanced situation. <ul style="list-style-type: none"> <li>- If they are small but absorb a lot of water, make sure to check and follow the related directions in the user manual and follow the directions.</li> </ul> </li> </ul>	-

## 5. EXPLODED VIEWS AND PARTS LIST



### [MATERIAL CODE STANDARDS]

Material codes and names and their respective naming rules are managed in accordance with the prescribed standards. Please refer to these standards when requesting a material.

#### 1. Material Code Type

● : Number

■ : Letter (Alphabet)

<b>Type 1</b>	 ex) 0204-000418 FREON	<b>Enterprise-wide parts</b> Type 1 materials can be used for all Samsung Electronics products. (Most electrical parts belong to this type.)
<b>Type 2</b>	 ex) DC96-01390A ASSY-CONTROL	<b>Division-wide parts (DC**-Washing machine)</b> Type 2 materials can be used for specific products. (Most instruments and tools belong to this type.)

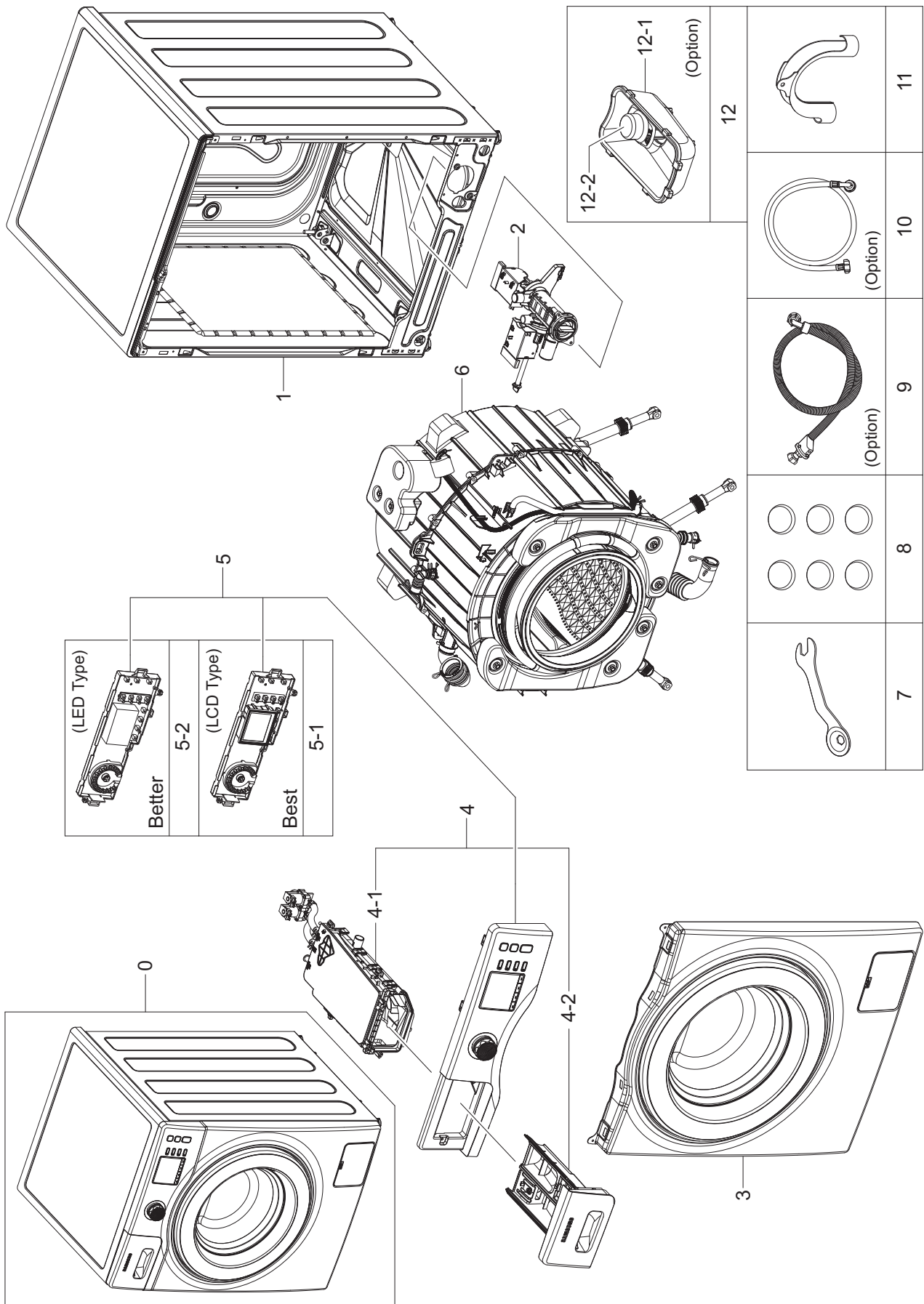
#### 2. Ass'y Materials


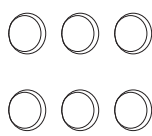



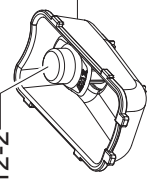
All ass'y material codes start with DC9\*.

An ass'y material is created by combining more than two materials. If a requested material cannot be provided, you can request an ass'y material that contains that material.



5-1. MAIN (WF1124XAC/XEF, WF1124XBC/XEF)



	7
	8
	9 (Option)
	10 (Option)
	11 (Option)
	12 (Option)

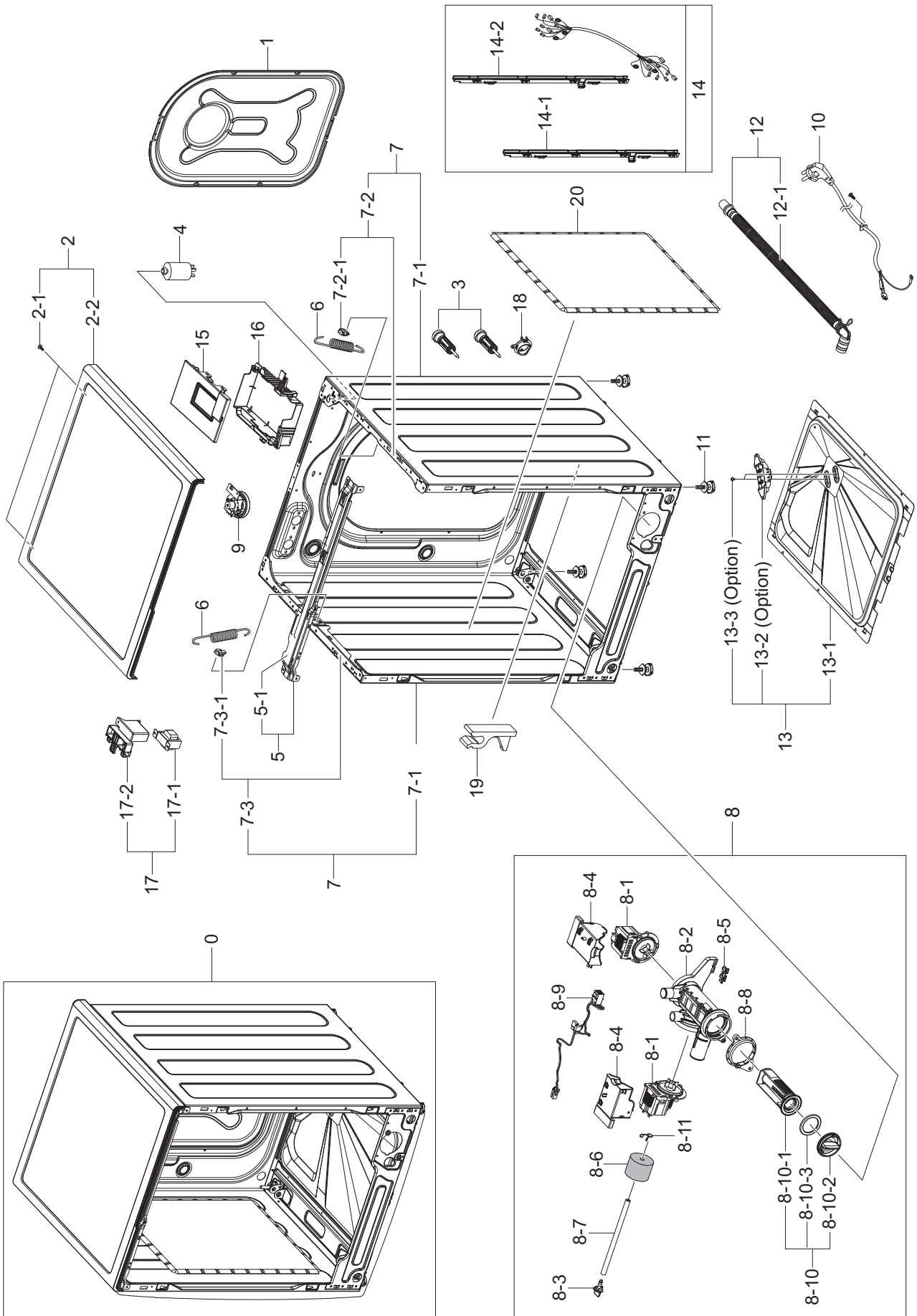


## MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Drawing No.	Code No.	Description	Specification	QTY	Un	SA/SNA
0	WF1124XAC/XEF	ASSY-WASHING MACHINE	ARNO			
1		FRAME & COVER PARTS	Refer to 5.2 Frame & Cover Parts	1		
2	DC97-16645A	ASSY PUMP DRAIN	ARNO,WF1124ZAC/XEF	1	PC	SA
3	DC90-06009A	ASSY FRONT	ARNO PJT,WF1124ZAC/XEF	1	PC	SNA
4	DC90-06007A	ASSY DRAWER	ARNO PJT,WF1124ZAC/XEF	1	PC	SNA
4-1	DC97-16643A	ASSY HOUSING DRAWER	ARNO,WF1124ZAC/XEF	1	PC	SA
4-2	DC97-16696A	ASSY DRAWER	ARNO,WF1124ZAC	1	PC	SA
5	DC90-06008A	ASSY PANEL CONTROL	ARNO PJT,WF1124ZAC/XEF	1	PC	SNA
5-1	DC92-00673A	ASSY PCB SUB	ARNO,WF1124ZAC,12KG,230V/50Hz,Y,SMPS	1	PC	SA
5-2	DC92-00676A	ASSY PCB SUB	ARNO,WF1124ZBC,12KG,230V/50Hz,L ED,Y,SMPS	1	PC	SA
6		ASSY TUB & DRUM	Refer to 5.3 Assy Tub & Drum	1		
7	DC60-40146A	BOLT-SPANER	-,CR,-,T2.5,OD36,-,-,-,-	1	PC	SA
8	DC67-00307A	CAP-FIXER	WF438AAC/XAA,PP,T1.5,BLK,RM60	6	PC	SA
10	DC62-10289B	HOSE-WATER(C)	WIP4013SRW,PVC+NYLON,ID10.2,L14 50,GRY,COLD/H19/REFLEX	1	PC	SA
11	DC62-10278A	HOSE-HANGER	PUMP MODEL,PP,BLK,RM60 RESIN	1	PC	SA
12	DC97-16128A	ASSY COVER DRAWER	SCOUT,WF0704L7W/XEF,PP	1	PC	SA
12-1	DC61-02581A	GUIDE-LIQUID(M)	WF0800NCE,PP,T2.0,W61,L118,SOAP BLUE	1	PC	SNA
12-2	DC67-00524A	CAP-DRAWER	WF0804Y8E/XEF,PP,T2.0,W27,L43.2,BLUE	1	PC	SA

5-2. FRAME & COVER PARTS (WF1124XAC/XEF, WF1124XBC/XEF)



**MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF**

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Drawing No.	Code No.	Description	Specification	QTY	Un	SA/SNA
0		FRAME & COVER PARTS		1		
1	DC97-16695A	ASSY COVER BACK	ARNO,WF1124ZAC/XEF	1	PC	SA
2	DC90-06006A	ASSY COVER TOP	ARNO PJT,WF1124ZAC/XEF	1	PC	SNA
2-1	6009-001476	SCREW-HEX	HEX,+M5,L10,ZPC(WHT),SWRCH18A,2	2	PC	SA
2-2	DC97-16691A	ASSY COVER TOP	ARNO,WF1124,WOOD+ABS,595*584.3,WHIT	1	PC	SA
3	DC97-14653C	ASSY FIXER TUB	SCOUT,WF0804Y8E/XEF	4	PC	SA
4	DC29-00015G	FILTER EMI	250V,15,53*53*97,50/60Hz,CAN	1	PC	SA
5	DC97-16692A	ASSY FRAME PLATE(U)	ARNO,WF1124ZAC/XEF	1	PC	SA
5-1	DC61-03081A	FRAME-PLATE(U)	ARNO-PJT,GI-SGCC,T1.2	1	PC	SA
6	DC61-03099A	SPRING ETC-HANGER	ARNO,HSWR,CD3.5,ID24.8,OD26,L159, TURNS 18 3/4,WHITE	2	PC	SA
7	DC97-16703A	ASSY FRAME	ARNO,WF1124ZAC	1	PC	SA
7-1	DC61-03086A	FRAME	ARNO-PJT,GI-SGCC,WHT,T1.0,W598,L792	1	PC	SNA
7-2	DC97-16693A	ASSY BRACKET SPRING(R)	ARNO,WF1124ZAC/XEF	1	PC	SNA
7-2-1	DC61-02065A	GUIDE-SPRING	WF448AAG/ XXA,POM,T4,W24,L25.5,WHT,-	1	PC	SA
7-3	DC97-16694A	ASSY BRACKET SPRING(L)	ARNO,WF1124ZAC/XEF	1	PC	SNA
7-3-1	DC61-02065A	GUIDE-SPRING	WF448AAG/ XXA,POM,T4,W24,L25.5,WHT,-	1	PC	SA
8	DC97-16645A	ASSY PUMP DRAIN	ARNO,WF1124ZAC/XEF	1	PC	SA
8-1	DC31-00030A	PUMP-DRAIN	B20-6,220V,50Hz,-,HANYU	2	PC	SA
8-2	DC61-03082A	CASE-PUMP	ARNO,PP,T2.5,W144.6,L165.17,WHITE, 2WAY/SEAU	1	PC	SA
8-3	DC61-10673A	CAP-DRAIN	SWF-P12,PP,-,-,-,WHT,-	1	PC	SNA
8-4	DC63-00830A	COVER-PUMP	COVER-PUMP,PP,T2.1,W60.5,L75,V0 GRADE,WHT	2	PC	SNA
8-5	DC63-00905A	CUSHION-PUMP	WF8802DPF/XET,NBR,- ,W37.6,L11.6,BLK,-	1	PC	SNA
8-6	DC63-10003C	ABSORBER SPONGE	SWF-P12,POL,GRY	1	PC	SNA
8-7	DC67-00244H	HOSE-DRAIN	WF1124ZAC,EPDM,ID6,OD11,T2.5,L4 20,BLK	1	PC	SNA
8-8	DC69-01770A	PACKING-PUMP	ARNO-PJT,RUB- OTH,BUTYL,T2.5,W74,L74,11.6,BLK	1	PC	SNA
8-9	DC93-00150D	ASSY WIRE HARNESS-PUMP	ARNO,WF1124ZAC/XEF,110~240V/50~6 0HZ,DRAIN+BUBBLE,30W,30W	1	PC	SA
8-10	DC97-16642A	ASSY FILTER	ARNO,WF1124ZAC/XEF	1	PC	SA
8-10-1	DC63-01341A	FILTER-PUMP	ARNO- PJT,PP,T2.0,W52.8,L123,NTR,2WAY/ SEAU	1	PC	SNA
8-10-2	DC64-01317A	HANDLE-FILTER	HANDLE-FILTER,PP,T2.5,W55,L35,- ,BLK,-	1	PC	SNA
8-10-3	DC73-00022A	SEAL-PACKING	SEW-HVR149ATA,EPDM,BLK,40	1	PC	SNA

**MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF**

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

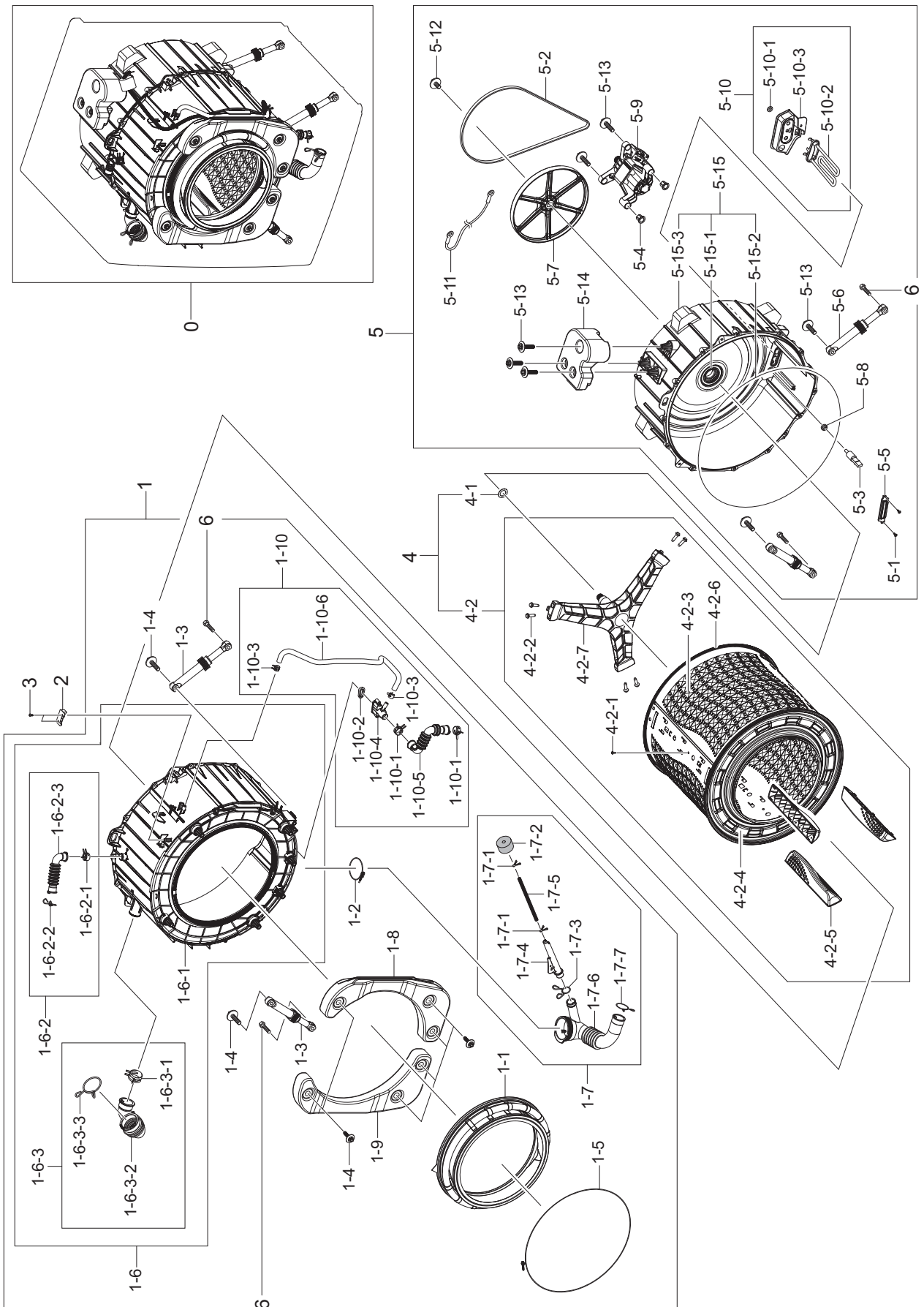
Drawing No.	Code No.	Description	Specification	QTY	Un	SA/SNA
8-11	DD65-00001F	CLAMPER HOSE	SDW-H120,STEEL,-,D10.5/T1.2,-,-	1	PC	SNA
9	DC96-01703B	ASSY SENSOR PRESSURE	PURPLE PJT,PURPLE PJT,0~300mmH20,non pcb,-,-	1	PC	SA
10	DC90-11229B	ASSY POWER CORD	BF3,-,SWF-P12,1900	1	PC	SA
11	DC97-00920C	ASSY LEG	SEW-HW108,-,-,-,-,-	4	PC	SC
12	DC97-16680A	ASSY HOSE DRAIN(O)	ARNO,WF1124,ASSY,L1850,OD27	1	PC	SNA
12-1	DC67-00330B	HOSE-PUMP	WF8802DPF,PP,ID20.6,OD27,-,L1850,GRY,BLOW SPIRAL	1	PC	SA
13	DC97-14642A	ASSY PLATE BOTTOM	-,-,NON LEAKAGE SENSOR,-,-,-	1	PC	SA
13-1	DC61-01938A	COVER-BOTTOM	HEBA-PJT,GI,T0.5,AEGIS-6Kg,-,-,L491,NTR,-	1	PC	SNA
14	DC93-00277A	ASSY M.GUIDE WIRE HARNESS	ARNO,WF1124ZAQ/XEF,110~240V/50~60HZ,COLD	1	PC	SA
14-1	DC61-03102A	GUIDE-WIRE(F)	ARNO,PP,T1.5,W21.5,L485,NTR,FRONT	1	PC	SA
14-2	DC61-03103A	GUIDE-WIRE(B)	ARNO,PP,T1.5,W58.6,L527,NTR,BACK	1	PC	SNA
15	DC63-01345A	COVER-PCB(M)	ARNO,HIPS,T2.5,NTR,VE-1877(V0)	1	PC	SNA
16	DC92-00675A	ASSY PCB MAIN	ARNO,WF1124ZAC,12KG,230V/50Hz,Y,SMPS	1	PC	SA
17	DC93-00279A	ASSY TRANS REACTORV	ARNO,220V/60Hz	1	PC	SA
17-1	DC26-00009P	TRANS-REACTOR	8.5mH,220V-240V,3A,220V-240V,3A,0.75ohm,50Hz-60Hz,48x40mm	1	PC	SA
17-2	DC61-03107A	BRACKET-REACTOR	ARNO,PP,T3.0,NTR,5VA GRADE	1	PC	SA
18	DC61-00274A	GUIDE-HOSE	P/PV/M,PP,-,-,-,WHT,FRAME/DRAIN-HOSE	1	PC	SA
19	DC61-02601A	GUIDE-HOSE	DRUM-MIDIUM SIZE,EPP,T142,GRAY	1	PC	SA
20	DC63-01313A	ABSORBER-SOUND	SCOUT2-PJT,PP,T10,W500,L500,SOUND ABSORPTION, ASSY COVER TOP	1	PC	SNA

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# MEMO

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5-3. ASS'Y TUB&DRUM (WF1124XAC/XEF, WF1124XBC/XEF)



## MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Drawing No.	Code No.	Description	Specification	QTY	Un	SA/SNA
0	DC90-03364A	ASSY TUB & DRUM		1		
1	DC90-06017A	ASSY TUB FRONT	ARNO PJT,WF1124ZAC/XEF	1	PC	
1-1	DC64-02684A	DOOR-DIAPHRAGM	ARNO-PJT,EPDM,T2.0,GRY,WASHER	1	PC	
1-2	DC65-00021A	CLAMPER HOSE-JOINT	HEBA PJT,HSWR,-,ID74/OD78,WHT,-	1	PC	
1-3	DC66-00343K	DAMPER-SHOCK	GE24"-PJT,PP,60N,W24,L127,BLK,1-BUSH	2	PC	
1-4	DC97-14263A	ASSY BOLT	HEBA-PJT,MOTOR/ BOLT(M8)+WASHER(OD28.6),-,-,-,-	2	PC	
1-4	DC97-14263A	ASSY BOLT	HEBA-PJT,MOTOR/ BOLT(M8)+WASHER(OD28.6),-,-,-,-	6	PC	
1-5	DC97-14618A	ASSY CLAMP DIAPHRAGM	WF8804DP,OD2.0/L2438,-,-,-,-	1	PC	
1-6	DC97-16628A	ASSY SEMI TUB FRONT	ARNO,WF1124ZAC/XEF	1	PC	
1-6-1	DC61-03100A	TUB-FRONT	ARNO PJT,FRPP,ID544,OD550,NTR	1	PC	
1-6-2	DC97-14873B	ASSY HOSE AIR	HEBA,WF8702,-,L150,OD25,BLACK	1	PC	
1-6-2-1	DC61-00158A	CLAMPER HOSE	SW65ASP,SK5,ID23,T0.8/YEL	1	PC	
1-6-2-2	DC65-60118J	CLIP-RING	HSWR,WHT,PI2.0/ID23	1	PC	
1-6-2-3	DC67-00354A	HOSE-AIR	HEBA PJT,EPDM,-,-,T2.5,-,BLK,7kg	1	PC	
1-6-3	DC97-14874C	ASSY HOSE DRAWER	HEBA BIGBANG,WF0800NCE,EPDM+BAND- RING	1	PC	
1-6-3-1	DC61-00219G	CLAMPER HOSE	HEBA BIGBANG,SK5,ID37/OD39/H10/ T1.0	1	PC	
1-6-3-2	DC67-00422A	HOSE-DRAWER TUB	HEBA- PJT,EPDM,ID42.5,OD46.5,T2.0,BLK	1	PC	
1-6-3-3	DC72-00001G	CLIP-RING	HEBA-PJT,HSWR,PI3.0,ID49.5,W21.5,W HT,HOSE-DRAWER + TUB-FRONT	1	PC	
1-7	DC97-16644A	ASSY HOSE PRESSURE	ARNO,WF1124ZAC/XEF	1	PC	
1-7-1	DC61-70029C	SPRING-CLIP	SEW-HW125,HSWR,CD1.2,ID8.1,OD1 0.5,WHT	1	PC	
1-7-1	DC61-70029C	SPRING-CLIP	SEW-HW125,HSWR,CD1.2,ID8.1,OD1 0.5,WHT	1	PC	
1-7-2	DC63-10003C	ABSORBER SPONGE	SWF-P12,POL,GRY	1	PC	
1-7-3	DC65-60125B	CLIP-RING	HSWR,T2.4,PI25,YEL	1	PC	
1-7-4	DC67-00297A	HOSE-JOINT AIR	HEBA&Aegis- PJT,PP,ID22,OD26,T2.0,L150,NTR	1	PC	
1-7-5	DC67-00576A	HOSE-WATER	ARNO,TPE,ID4.5,OD10,T2.75,L880,BLK	1	PC	
1-7-6	DC67-00577A	HOSE-FILTER TUB	ARNO,EPDM,T1.5,GRY	1	PC	
1-7-7	DC72-00001H	CLIP-RING	HEBA- PJT,HSWR,PI3.0,ID35,WHT,HOSE- FILTER+PUMP-CASE	1	PC	
1-8	DC97-16697A	ASSY WEIGHT BALANCER-(R)	ARNO,WF1124ZAC/XEF	1	PC	
1-9	DC97-16698A	ASSY WEIGHT BALANCER-(L)	ARNO,WF1124ZAC/XEF	1	PC	
1-10	DC97-16722A	ASSY HOSE-CIRCULATION	ARNO,WF1124ZAC,EPDM,BLACK	1	PC	
1-10-1	DC61-00158A	CLAMPER HOSE	SW65ASP,SK5,ID23,T0.8/YEL	2	PC	

## MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Drawing No.	Code No.	Description	Specification	QTY	Un	SA/SNA
1-10-2	DC62-00296A	SEAL-CONNECTOR	WF0804Y8E,EPDM,W9.5,L45.3,SCOUT-PJT	1	PC	
1-10-3	DC65-00008A	CLAMPER HOSE	SEW-DR605,SK5,-,-,YEL,ID14.2/T0.9	2	PC	
1-10-4	DC67-00462A	HOSE-CONNECTOR	WF0804Y8E,PP,NTR,SCOUT-PJT	1	PC	
1-10-5	DC67-00568A	HOSE-AIR TUB	ARNO-PJT,EPDM,T1.5,BLK	1	PC	
1-10-6	DC67-00579A	HOSE-CIRCULATION	ARNO,EPDM,ID9.0,OD14.5,L800,BLK	1	PC	
2	DC93-00278A	ASSY SENSOR	MEMS SENSOR,410mm,ARNO	1	PC	
3	6002-000213	SCREW-TAPPING	TH,+,-,1,M4,L12,ZPC(WHT),SWRCH18A,-	2	PC	
4	DC90-06011A	ASSY DRUM	ARNO PJT,WF1124ZAC/XEF	1	PC	
4-1	6031-001640	WASHER-SPRING	STS,-,ID35.2,OD39.0,T0.3,-,HEIGHT 2.0	1	PC	
4-2	DC97-16699A	ASSY DRUM	ARNO,WF1124ZAC,D507.4 x H490.8,1400RPM	1	PC	
4-2-1	6002-001435	SCREW-TAPPING	TH,+2,M4,L12,PASS,STS430	3	PC	
4-2-2	DC60-40137A	BOLT-HEX	MARS-PJT,STS430,M8,-,P1.25,L30,-,-,HEX/KNURING	6	PC	
4-2-3	DC66-00674A	DRUM-WRAPPER	ARNO,STAINLESS-STS430,OD504.2,L421.3,T0.6,W1605.2xH429.5,2nd CUBE DRUM	1	PC	
4-2-4	DC66-00675A	DRUM-FRONT	ARNO,STAINLESS-STS430,ID321,OD503,T0.5	1	PC	
4-2-5	DC66-00677A	DRUM-LIFTER	ARNO,PP,W54,H45.8,L302,T2.5,GRAY	3	PC	
4-2-6	DC66-00678A	DRUM-BACK	ARNO,STAINLESS-STS430,OD503,T0.5	1	PC	
4-2-7	DC97-16625A	ASSY FLANGE SHAFT	ARNO,WF1124ZAC/XEF	1	PC	
5	DC90-06010A	ASSY TUB BACK	ARNO PJT,WF1124ZAC/XEF	1	PC	
5-1	6002-000471	SCREW-TAPPING	TH,+,-,1,M4,L12,PASS,STS304,-	2	PC	
5-2	6602-001497	BELT-TIMING GEAR	-,RUBBER(GATES),T3.4,-,1270-5J,BLK	1	PC	
5-3	DC32-00010C	THERMISTOR	11982OHM AT 25°C,-55~155,5,100	1	PC	
5-4	DC61-01088A	BUSH-MOTOR	Q1636,NYLON6,ID16,OD20,L21.5,NTR,-	2	PC	
5-5	DC61-02664A	BRACKET-HEATER	HEBA,STAINLESS-STS430,T0.6,W110.5	1	PC	
5-6	DC66-00343K	DAMPER-SHOCK	GE24"-PJT,PP,60N,W24,L127,BLK,1-BUSH	2	PC	
5-7	DC66-00530B	PULLEY-MOTOR	HEBA BIGBANG,ALDC12,OD296.8,INVOLUTE SERRATION	1	PC	
5-8	DC69-00824A	PACKING-THERMISTOR	GW-PJT,EPDM,EPDM,-,W17,-,H11,BLACK,1.25g,-,-,-	1	PC	
5-9	DC93-00247A	ASSY DD BLDC MOTOR	Arno,Volga,DWSF500,F,220-240(PWM DC310V),FREE,1350	1	PC	
5-10	DC93-00281A	ASSY HEATER	ARNO,230V/2000W,CERAMIC/GREEN	1	PC	
5-10-1	6031-001531	WASHER-PLAIN	SCP1,ID7,OD14,T1.2,ZPC2(YEL),ACE-PJT	1	PC	
5-10-2	DC47-00033A	HEATER-WASH	HEBA,SUS316L+CERAMIC COATING,2000,8.69,230V,26.46,8.5mm,220mm,Double Fuse (167□, Cut Off Time 70±20s)	1	PC	

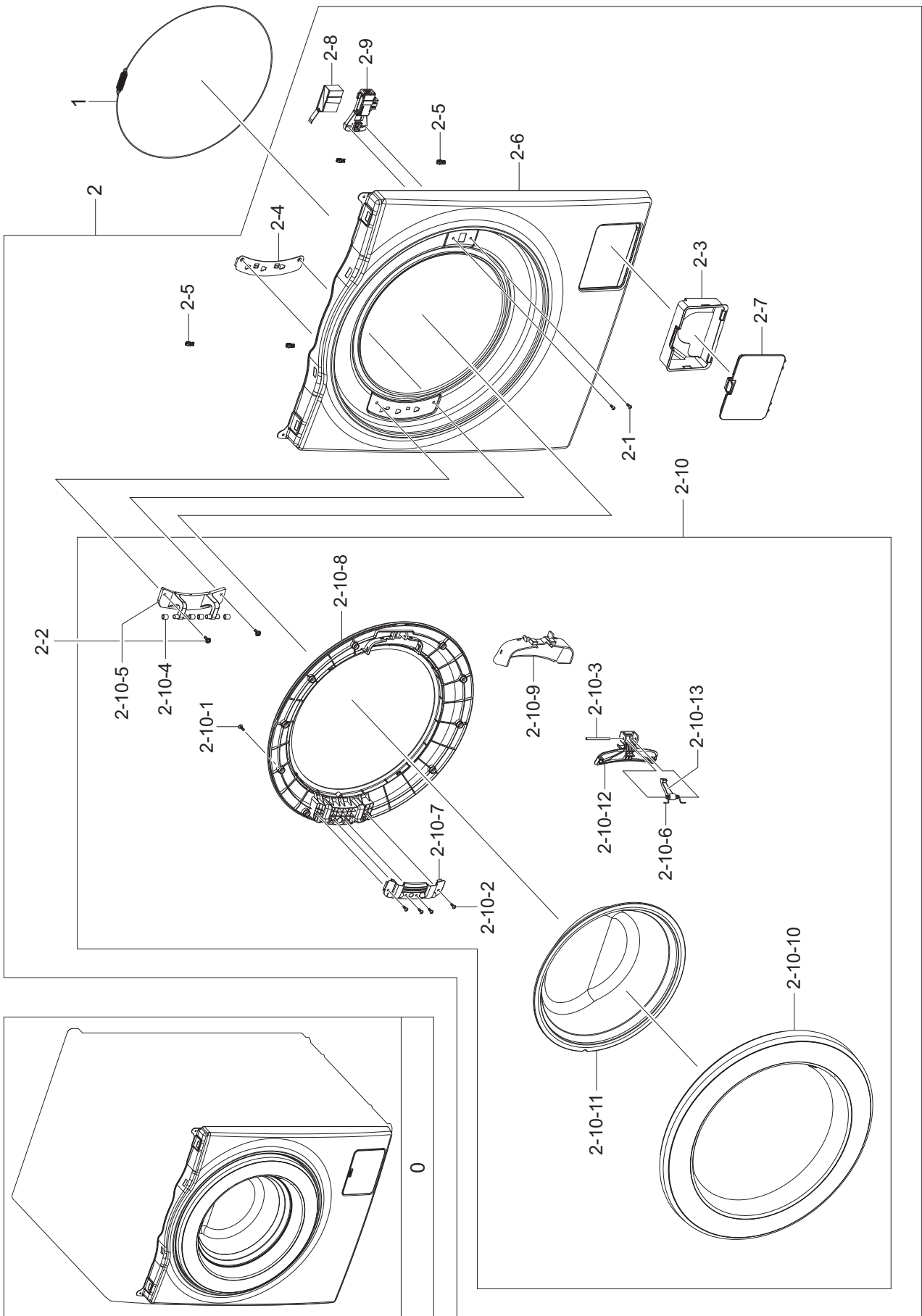


**MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF**

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Drawing No.	Code No.	Description	Specification	QTY	Un	SA/SNA
5-10-3	DC63-01340A	COVER-HEATER	ARNO,PP,T3.0,W122.0,L66.2,V0	1	PC	
5-11	DC96-01327D	ASSY WIRE HARNESS	ARNO,WF1124ZAQ/ XEF,220~240V/50~60HZ,TUB EARTH WIRE	1	PC	
5-12	DC97-06080A	ASSY BOLT	SEW-3HR107,BOLT+WASHER,-,-,-,-	1	PC	
5-13	DC97-14263A	ASSY BOLT	HEBA-PJT,MOTOR/ BOLT(M8)+WASHER(OD28.6),-,-,-,-	2	PC	
5-13	DC97-14263A	ASSY BOLT	HEBA-PJT,MOTOR/ BOLT(M8)+WASHER(OD28.6),-,-,-,-	2	PC	
5-13	DC97-14263A	ASSY BOLT	HEBA-PJT,MOTOR/ BOLT(M8)+WASHER(OD28.6),-,-,-,-	3	PC	
5-14	DC97-16702A	ASSY WEIGHT BALANCER-(U)	ARNO,WF1124ZAC,5.5kg,PP+CONCR ETE	1	PC	
5-15	DC97-16708A	ASSY TUB BACK	ARNO,WF1124ZAC	1	PC	
5-15-1	DC62-00156A	SEAL-OIL	TS85-PJT,NBR(SD45.5),BLK,-,-,- ,JINYANG	1	PC	
5-15-2	DC69-01769A	PACKING-TUB	ARNO,EPDM,EPDM,T5.5,L1720,BLK	1	PC	
5-15-3	DC97-16726A	ASSY SEMI TUB BACK	ARNO,WF1124ZAC	1	PC	
6	6011-001644	BOLT-HEX	M10,L35,ZPC2(YEL),SM10C,DAMPER	4	PC	

5-4. ASS'Y FRAME FRONT (WF1124XAC/XEF, WF1124XBC/XEF)

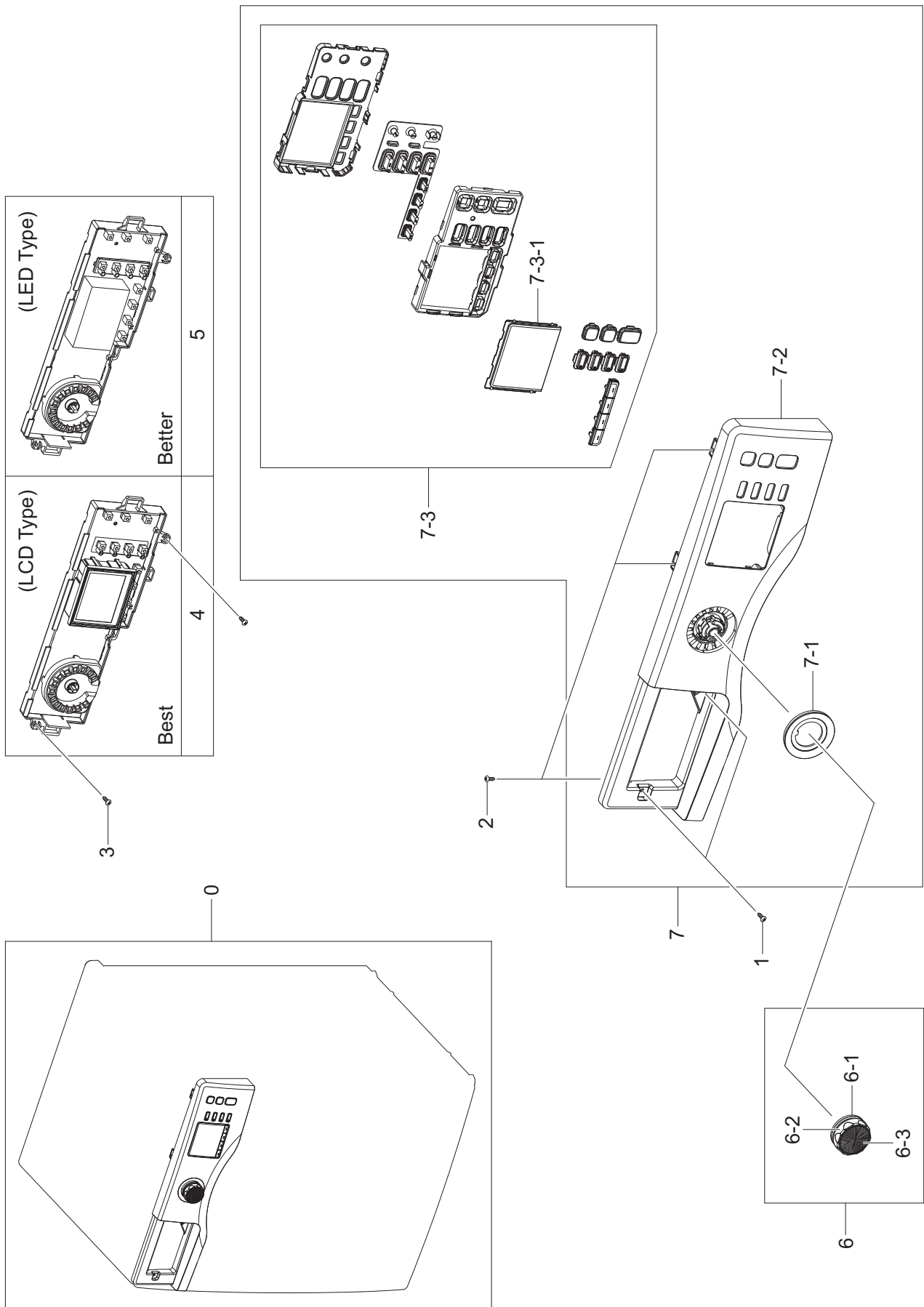


**MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF**

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Drawing No.	Code No.	Description	Specification	QTY	Un	SA/SNA
0	DC90-06009A	ASSY FRONT	ARNO PJT,WF1124ZAC/XEF	1	PC	SNA
1	DC91-12078D	ASSY WIRE DIAPHRAGM	HEBA-PJT,-,-,-,-	1	PC	SA
2	DC97-16631A	ASSY FRAME FRONT	ARNO,WF1124ZAC/XEF	1	PC	SA
2-1	6002-001435	SCREW-TAPPING	TH,+2,M4,L12,PASS,STS430	2	PC	SNA
2-2	6009-001522	SCREW-HEX	HEX,+,- ,M5,L16,PASS,STS430,FP,NYLOCK	2	PC	SA
2-3	DC61-01917A	GUIDE-FILTER	WF8804DP,PP,T2.5,W300,L200,WHT,-	1	PC	SA
2-4	DC61-01919A	BRACKET-HINGE	WF8804DP,GI,T1.4,W30,L150,-,TAP	1	PC	SA
2-5	DC61-02577A	GUIDE-FRAME FRONT	WF0800NCE,POM,T2.0,W10,L15,NTR, HEBA BIGBANG	4	PC	SA
2-6	DC61-03094A	FRAME-FRONT	ARNO,EGI- SECC,WHT,T0.8,W598,L724,PCM	1	PC	SA
2-7	DC63-00854A	COVER-FILTER	WF8804DP,ABS,T2.0,W300,L200,-, ,WHT,-	1	PC	SA
2-8	DC63-00967A	COVER-DOOR SWITCH	AEGIS-PJT/ WF8500NHW,PP,T2.5,W2 5.9,L90.2,V0 GRADE,WHT	1	PC	SA
2-9	DC64-01538A	DOOR-LOCK S/W	ZV-446L5,PA66,T19.5,-,W95.3,- ,BLK,250V/16A	1	PC	SA
2-10	DC97-16727A	ASSY DOOR	ARNO,WF1124ZAC	1	PC	SA
2-10-1	6002-000444	SCREW-TAPPING	TH,+2,M4,L14,PASS,STS430	9	PC	SA
2-10-2	6002-001306	SCREW-TAPPING	TH,+,- ,1,M4,L14,ZPC(WHT),SWRCH18A,-	4	PC	SA
2-10-3	6043-001093	PIN-PARALLEL(KEY)	A,OD3,L40,PASS,STS204	1	PC	SA
2-10-4	DC61-00891A	GUIDE-HINGE	HAUZEN(DOM),POM,-,-,-,WHT,HINGE	4	PC	SA
2-10-5	DC61-01910A	HINGE-DOOR	WF8804DP,ALDC,T5.0,W30,L150,-,-,Ni	1	PC	SA
2-10-6	DC61-02027A	SPRING ETC-LEVER	STAINLESS- STS304,CD1.2,ID3.5,L15,6 TURNS	1	PC	SA
2-10-7	DC61-03084A	BRACKET-HOLDER	ARNO,GI-SGCC,T1.2	1	PC	SA
2-10-8	DC61-03088A	HOLDER-GLASS	ARNO,PP,T3.0	1	PC	SA
2-10-9	DC63-01384A	COVER-HANDLE	WF1124ZAC,ABS,T2.5,W55.9,L130.7 ,GRAY	1	PC	SA
2-10-10	DC63-01387A	COVER-DOOR	WF1124ZAC,ABS,T3,W475,L475,NTR	1	PC	SA
2-10-11	DC64-01790A	DOOR-GLASS	AEGIS,NON-HeatTreatment GLASS,T5.0,W353.0	1	PC	SA
2-10-12	DC64-02720A	HANDLE-DOOR	WF1124ZAC,ABS,T1.5,W28.6,L111.9 ,GRAY	1	PC	SA
2-10-13	DC66-00497A	LEVER-DOOR	WF8804DP,ZNDC,T10,W10,L35,-,-,NI	1	PC	SA

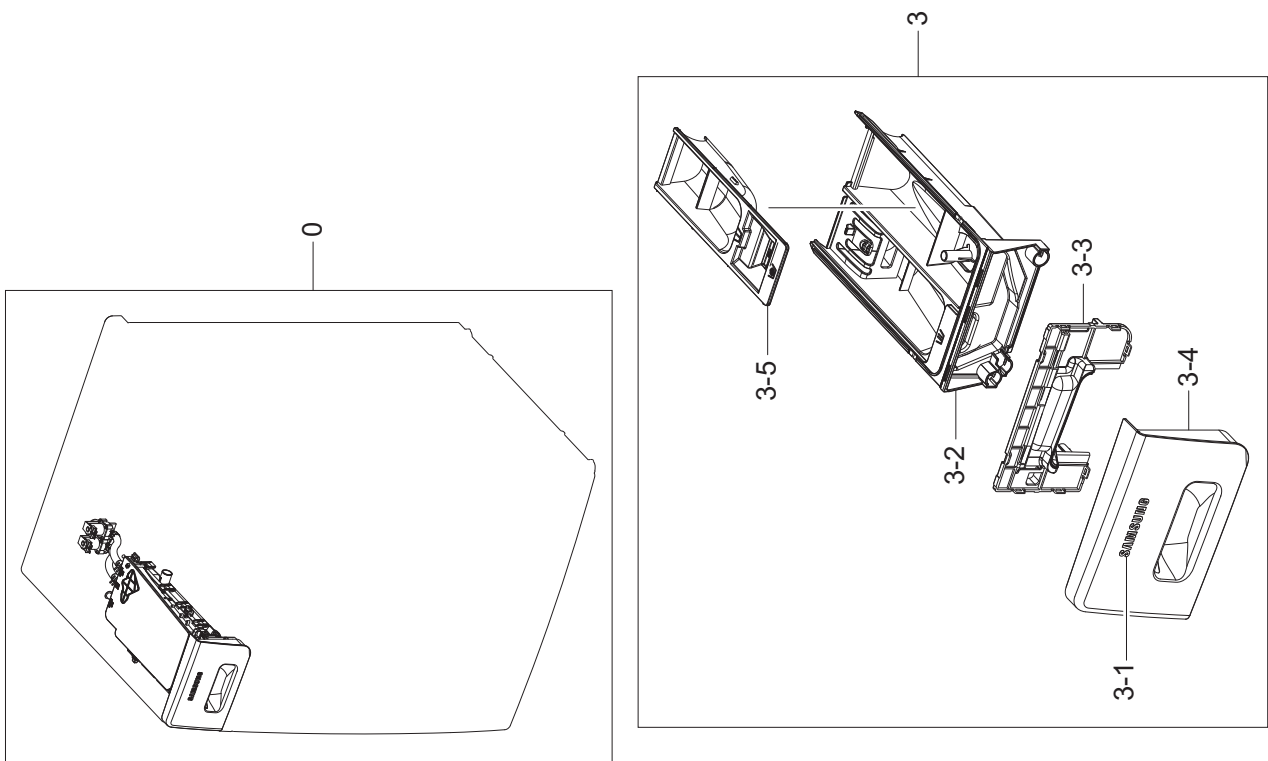
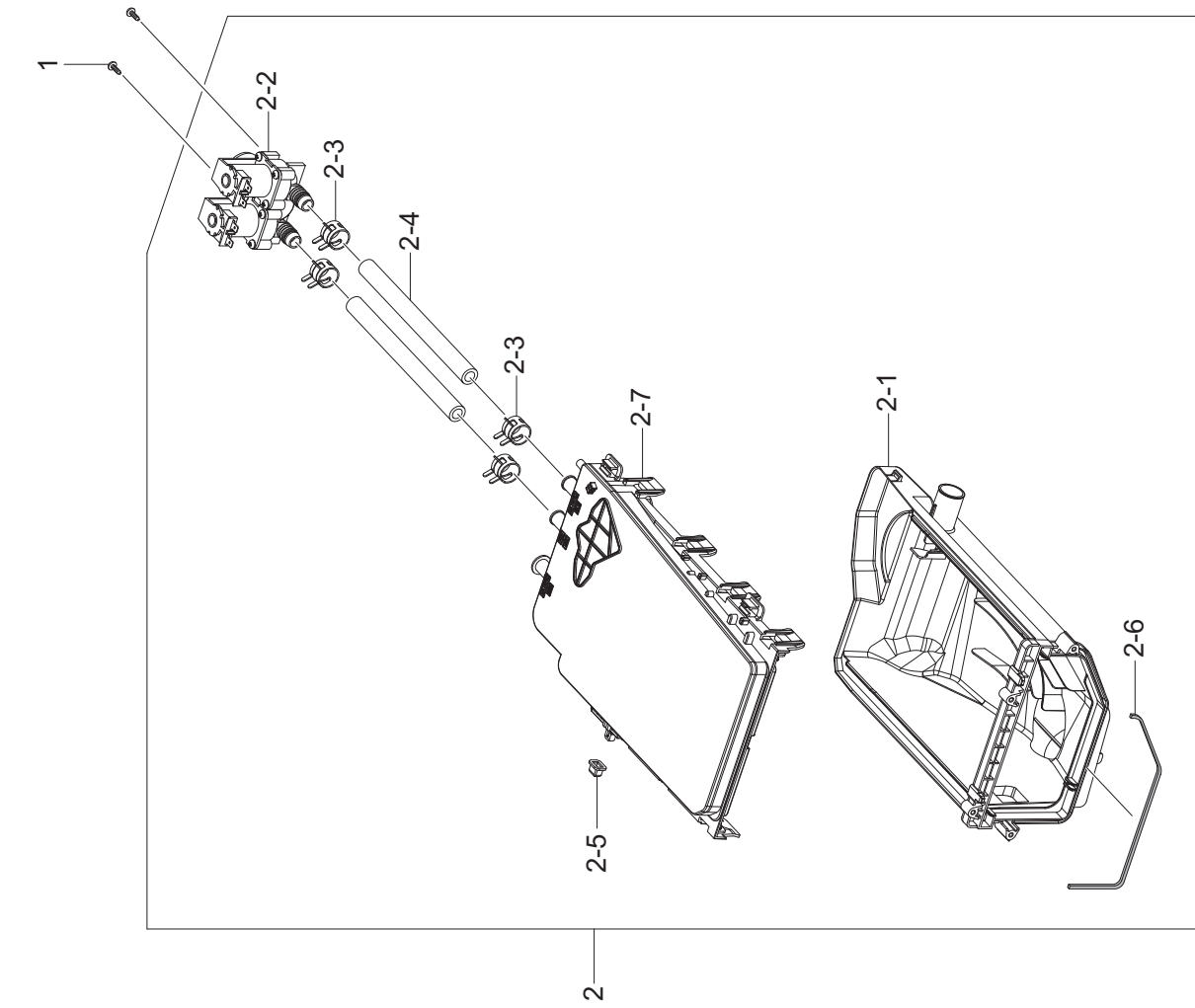
5-5. PANEL-CONTROL & DRAWER (WF1124XAC/XEF, WF1124XBC/XEF)



**MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF**Service Bom (**SA**: SERVICE AVAILABLE, **SNA**: SERVICE NOT AVAILABLE)

Drawing No.	Code No.	Description	Specification	QTY	Un	SA/SNA
0	DC90-06008A	ASSY PANEL CONTROL	ARNO PJT,WF1124ZAC/XEF	1	PC	SNA
1	6002-000445	SCREW-TAPPING	TH,+2,M4,L18,PASS,STS304	2	PC	SA
2	6002-000520	SCREW-TAPPING	TH,+,- ,2,M4,L12,ZPC(WHT),SWRCH18A,-	3	PC	SA
3	6002-001306	SCREW-TAPPING	TH,+,- ,1,M4,L14,ZPC(WHT),SWRCH18A,-	2	PC	SA
4	DC92-00673A	ASSY PCB SUB	ARNO,WF1124ZAC,12KG,230V/50Hz,Y ,SMPS	1	PC	SA
5	DC92-00676A	ASSY PCB SUB	ARNO,WF1124ZBC,12KG,230V/50Hz,L ED,Y,SMPS	1	PC	SA
6	DC97-15723B	ASSY KNOB ENCODER	GRIFFIN-PJT,WF9904RWE,SILVER+BL ACK,PC+ABS+CR	1	PC	SA
6-1	DC64-01927A	KNOB-ENCODER	WF9904RWE/XEU,ABS,T2.5,W49.8,L38. 7,BLACK,GRIFFIN-PJT	1	PC	SNA
6-2	DC64-01931A	DECORATION-ENCODER	WF9904RWE/ XEU,ABS,T2.2,W50.8,L14.7,DA WHITE,GRIFFIN-PJT	1	PC	SNA
6-3	DC97-16503A	ASSY DECO ENCODER	GRIFFIN,WF9904RWE,43.6,PC+Tape	1	PC	SNA
7	DC97-16701A	ASSY PANEL CONTROL	ARNO,WF1124ZAC,WHITE	1	PC	SA
7-1	DC64-02674A	WINDOW-ENCODER	ARNO,PMMA,T2.0,R35,H6,TRANSPA RENT	1	PC	SNA
7-2	DC64-02694A	PANEL-CONTROL	ARNO,ABS,T3,W594,L81,H149,DA WHITE	1	PC	SA
7-3	DC97-16624A	ASSY BUTTON	ARNO,WF1124ZAC/XEF	1	PC	SA
7-3-1	DC64-02682A	WINDOW-PANEL	ARNO,PC,T2.0,TRANSPARENT	1	PC	SA

5-6. ASS'Y HOUSING DRAWER (WF1124XAC/XEF, WF1124XBC/XEF)

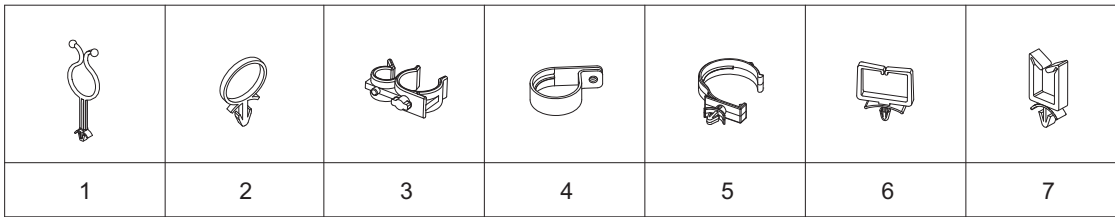


**MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF**

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Drawing No.	Code No.	Description	Specification	QTY	Un	SA/SNA
0	DC90-06007A	ASSY DRAWER	ARNO PJT,WF1124ZAC/XEF	1	PC	SNA
1	6003-000226	SCREW-TAPTYPE	TH,+,-,S,M4,L8,ZPC(WHT),SWRCH18A,-	2	PC	SC
2	DC97-16643A	ASSY HOUSING DRAWER	ARNO,WF1124ZAC/XEF	1	PC	SA
2-1	DC61-03085A	HOUSING-DRAWER(L)	ARNO-PJT,PP,T1.8,NTR	1	PC	SNA
2-2	DC62-00024M	VALVE-WATER	V7-PJT,NYLON,2WAY,MAX 10BAR,WHT,220/240V 50/60Hz	1	PC	SA
2-3	DC65-00008A	CLAMPER HOSE	SEW-DR605,SK5,-,-,YEL,ID14.2/T0.9	4	PC	SNA
2-4	DC67-00051B	HOSE-DRAWER	Q1636GW/XEU,EPDM,ID9.0,OD14.5,- ,-,BLK,-	0.2	M	SA
2-4	DC67-00051B	HOSE-DRAWER	Q1636GW/XEU,EPDM,ID9.0,OD14.5,- ,-,BLK,-	0.2	M	SA
2-5	DC67-00327A	CAP-DRAWER HOOK	HEBA-PJT,EPDM,T1.1,W13.9/ L10.8,H9.2,BLK,-	1	PC	SNA
2-6	DC72-00021A	ABSORBER SPONGE	Q1635V,PE-FOAM,OD6,L170,WHT	1	PC	SNA
2-7	DC97-16006A	ASSY S.HOUSING DRAWER	HEBA BIGBANG,WF0800NCE,PP	1	PC	SA
3	DC97-16696A	ASSY DRAWER	ARNO,WF1124ZAC	1	PC	SA
3-1	DA64-03804A	MASCOT	ALL,NI,T0.05,L65	1	PC	SA
3-2	DC61-02580A	BODY-DRAWER	WF0800NCE,PP,T2.0,L265,W154,WHT, HEBA BIGBANG	1	PC	SNA
3-3	DC64-02683A	HANDLE-DRAWER	ARNO,ABS,T2.0,WHT	1	PC	SNA
3-4	DC64-02686A	PANEL-DRAWER	ARNO,ABS,T2.5,W183.4,L114.8,DA WHITE	1	PC	SNA
3-5	DC67-00452A	CAP-RINSE	WF0800NCE,PP,T2.0,W66.5,L219,SOAP BLUE,HEBA BIGBANG	1	PC	SA

## 5-7. SMALL PARTS (WF1124XAC/XEF, WF1124XBC/XEF)



### MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Drawing No.	Code No.	Description	Specification	Install. Point	QTY	Un	SA/SNA
1	DC61-01736A	HOLDER-WIRE	SEW-HKR149ATA,NYLON66,-,-,128,-,NEW-K4 PJT	FRAME+MAIN(WIRE)	1	PC	SA
2	DC61-40083A	HOLDER-WIRE	DAWH-3ND,NYLON,NTR(PI25)/NYLON66	ASSY HEATER	1	PC	SNA
3	DC61-00133A	CLAMPER HOSE-FIX	P1291,PP,ID24.5,OD29.5,HOSE+PLUG,BJ-730	FRM+H-DRAIN+P-CODE	1	PC	SNA
4	DC61-00118A	CLAMPER HOSE-FIX	P1291,NYLON66,ID27,OD30	H-DRAIN(O)+FRAME	1	PC	SNA
5	DC61-02879A	HOLDER-WIRE	WF8804CPA,PA,L58.6,NATURAL	FRAME+HOSE(O)	1	PC	SNA
6	DC61-60074A	HOLDER-WIRE	PA,NTR,NYLON#66(DAWS-6NB)	BKT-SPRING(R)	1	PC	SA
6	DC61-60074A	HOLDER-WIRE	PA,NTR,NYLON#66(DAWS-6NB)	WIRE+FRAME(BACK_U)	1	PC	SA
7	DC61-00553B	HOLDER-WIRE SADDLE	PA,NTR,DAWS-3NE	ASSY FRAME PLATE(U)	2	PC	SA



## 5-8. PARTS LIST (OTHERS PARTS)

### MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Code No.	Description	Specification	Install. Point	QTY	Un	SA/SNA
0103-002581	POLYURETHANE	CPU-55B/UEP 700FB,V0,PUR	ASSY PCB MANUAL	0.1105	KG	SA
0103-002582	POLYURETHANE	UEP 700FA/CPU-55A,V0,PUR	ASSY PCB MANUAL	0.0795	KG	SA
3601-001668	FUSE-RADIAL LEAD	250V,1.6A,TIME LAG,4.3x8.4x7.6mm	ASSY PCB AUTO	1	PC	SA
6002-000239	SCREW-TAPPING	TH,+ ,NO,2S,M4,L8,ZPC(WHT),SW RCH18A	URETANE SCREW	2	PC	SA
6002-000445	SCREW-TAPPING	TH,+ ,2,M4,L18,PASS,STS304	BUBBLE KIT+TUB(F)	2	PC	SA
6002-000630	SCREW-TAPPING	PH,+ ,NO,2S,M3,L8,ZPC(WHT),SW RCH18A	ASSY HEAT SINK	1	PC	SA
6002-001306	SCREW-TAPPING	TH,+ ,-,1,M4, L14,ZPC(WHT),SWRCH18A,-	B.REACTOR+TRANS	1	PC	SA
6002-001306	SCREW-TAPPING	TH,+ ,-,1,M4, L14,ZPC(WHT),SWRCH18A,-	FRAME+MAIN-PCB	3	PC	SA
6002-001306	SCREW-TAPPING	TH,+ ,-,1,M4, L14,ZPC(WHT),SWRCH18A,-	T_FRONT+H-JOINT AIR	1	PC	SA
6002-001313	SCREW-HEX	HWH,+ ,-,M6.5,L25,ZPC(WHT),SW RCH18A,2,SERATION	T-FRONT+T-BACK	14	PC	SA
DC61-03097A	GUIDE-LED	ARNO,ABS,T1.5,W323.5,L106.0	ASSY PCB MANUAL	1	PC	SA
DC61-03097A	GUIDE-LED	ARNO,ABS,T1.5,W323.5,L106.0	ASSY PCB MANUAL	1	PC	SA
DC61-03098A	BRACKET- ENCODER	ARNO,ABS,T1.5,W76,L75.5	ASSY PCB MANUAL	1	PC	SA
DC61-03098A	BRACKET- ENCODER	ARNO,ABS,T1.5,W76,L75.5	ASSY PCB MANUAL	1	PC	SA
DC69-00367L	SHEET-PE	HELIOS,PE-FOAM,T2,W800,L800	W/M	1	PC	SA
DC94-00964A	ASSY PCB AUTO	ARNO,WF1124ZAC,12KG,230V/50 Hz,Y,SMPS,DC92-00673A	ASSY PCB MANUAL	1	PC	SA
DC94-00965A	ASSY PCB MANUAL	ARNO,WF1124ZAC,12KG,230V/50 Hz,Y,SMPS,DC92-00673A	ASSY PCB SUB	1	PC	SA
DC94-00966A	ASSY PCB SMD	ARNO,WF1124ZAC,12KG,230V/50 Hz,Y,SMPS,DC92-00673A	ASSY PCB AUTO	1	PC	SA
DC94-00967A	ASSY PCB AUTO	ARNO,WF1124ZAC,12KG,230V/50 Hz,Y,SMPS,DC92-00675A	ASSY PCB MANUAL	1	PC	SA
DC94-00968A	ASSY PCB MANUAL	ARNO,WF1124ZAC,12KG,230V/50 Hz,Y,SMPS,DC92-00675A	ASSY PCB MAIN	1	PC	SA
DC94-00969A	ASSY PCB SMD	ARNO,WF1124ZAC,12KG,230V/50 Hz,Y,SMPS,DC92-00675A	ASSY PCB AUTO	1	PC	SA
DC97-14006A	ASSY SCREW	WF203,-,SCREW-TAPPING,-,M4/ L16,-	PLATE(L)+PUMP	2	PC	SA

## 5-9. PARTS LIST (SCREW PARTS)

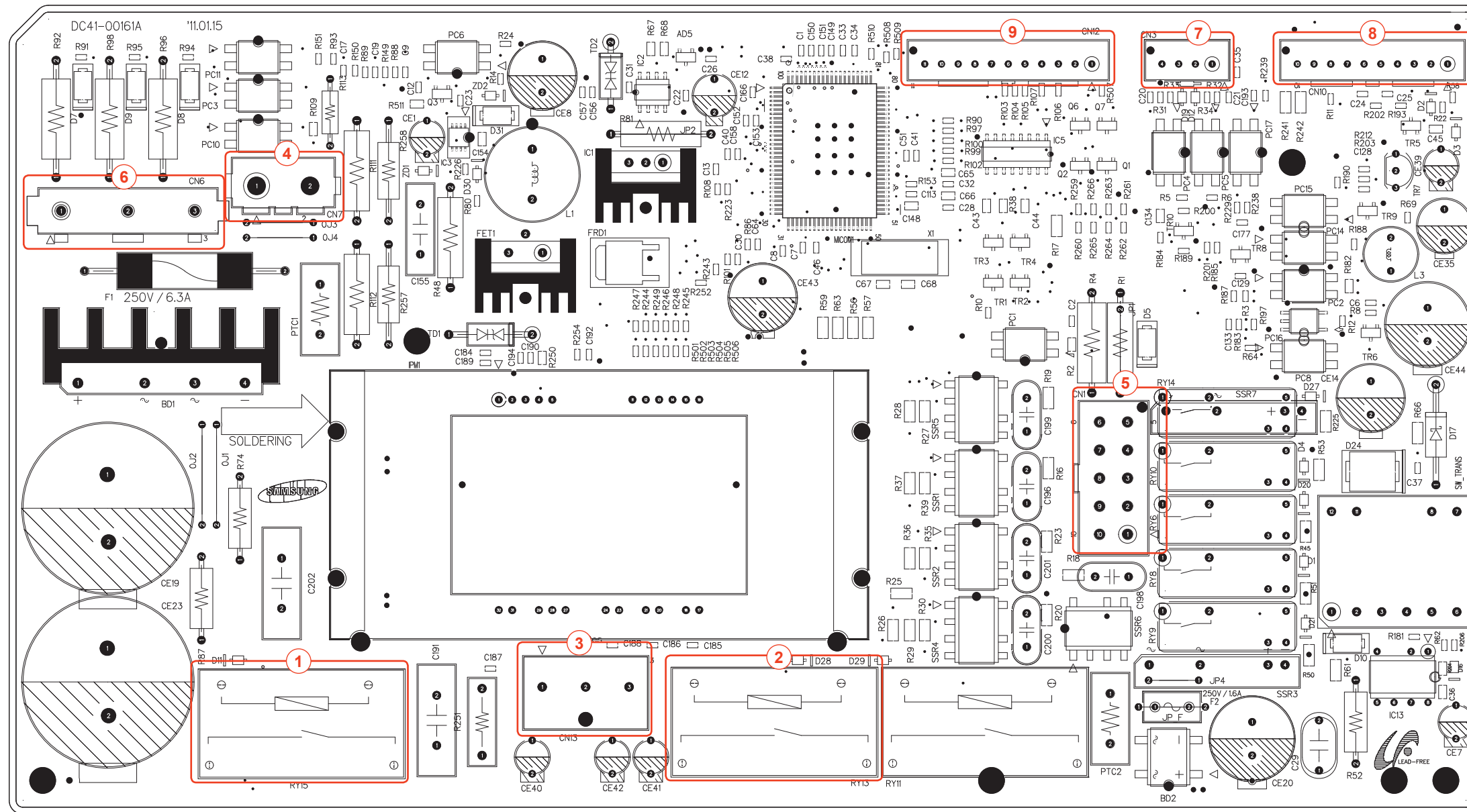
### MODEL CODE: WF1124XAC/XEF, WF1124XBC/XEF

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Code No.	Description	Specification	QTY	Un	SA/SNA
6001-000115	SCREW-MACHINE	BH,+,-,M3,L10,ZPC(WHT),SWRCH18A,-,-	4	PC	SNA
6002-000213	SCREW-TAPPING	TH,+,-,1,M4,L12,ZPC(WHT),SWRCH18A,-	2	PC	SNA
6002-000234	SCREW-TAPPING	TH,+,-,NO,2S,M4,L16,ZPC(WHT),SWRCH18A	2	PC	SNA
6002-000239	SCREW-TAPPING	TH,+,-,NO,2S,M4,L8,ZPC(WHT),SWRCH18A	2	PC	SA
6002-000444	SCREW-TAPPING	TH,+,-,2,M4,L14,PASS,STS430	9	PC	SA
6002-000445	SCREW-TAPPING	TH,+,-,2,M4,L18,PASS,STS304	4	PC	SA
6002-000471	SCREW-TAPPING	TH,+,-,1,M4,L12,PASS,STS304,-	2	PC	SA
6002-000520	SCREW-TAPPING	TH,+,-,2,M4,L12,ZPC(WHT),SWRCH18A,-	3	PC	SA
6002-000630	SCREW-TAPPING	PH,+,-,NO,2S,M3,L8,ZPC(WHT),SWRCH18A	1	PC	SA
6002-001306	SCREW-TAPPING	TH,+,-,1,M4,L14,ZPC(WHT),SWRCH18A,-	11	PC	SA
6002-001313	SCREW-HEX	HWH,+,-,M6.5,L25,ZPC(WHT),SWRCH18A,2,SERATION	14	PC	SA
6002-001435	SCREW-TAPPING	TH,+,-,2,M4,L12,PASS,STS430	5	PC	SNA
6002-001436	SCREW-TAPPING	PH,+,-,2,M4,L18,ZPC(WHT),SWRCH18A	6	PC	SNA
6003-000226	SCREW-TAPTYPE	TH,+,-,S,M4,L8,ZPC(WHT),SWRCH18A,-	2	PC	SC
6003-001768	SCREW-TAPTYPE	TH,+,-,WT,S,M4,L10,ZPC(WHT),SWRCH18A	2	PC	SNA
6006-001174	SCREW-TAPPING	TH,+,-,WE,2S,M4,L12,ZPC(WHT),SWRCH18A	20	PC	SNA
6009-001342	SCREW-SPECIAL	TH,+,-,M5,L11,ZPC(WHT),SWRCH18A,MACHINE,2BODY	2	PC	SNA
6009-001343	SCREW-SPECIAL	PH,TORX,M4,L10,ZPC(WHT),SWRCH18A,1,2BODY	1	PC	SNA
6009-001476	SCREW-HEX	HEX,+,-,M5,L10,ZPC(WHT),SWRCH18A,2	2	PC	SA
6009-001522	SCREW-HEX	HEX,+,-,M5,L16,PASS,STS430,FP,NYLOCK	2	PC	SA
DC97-14006A	ASSY SCREW	WF203,-,SCREW-TAPPING,-,M4/L16,-	2	PC	SA

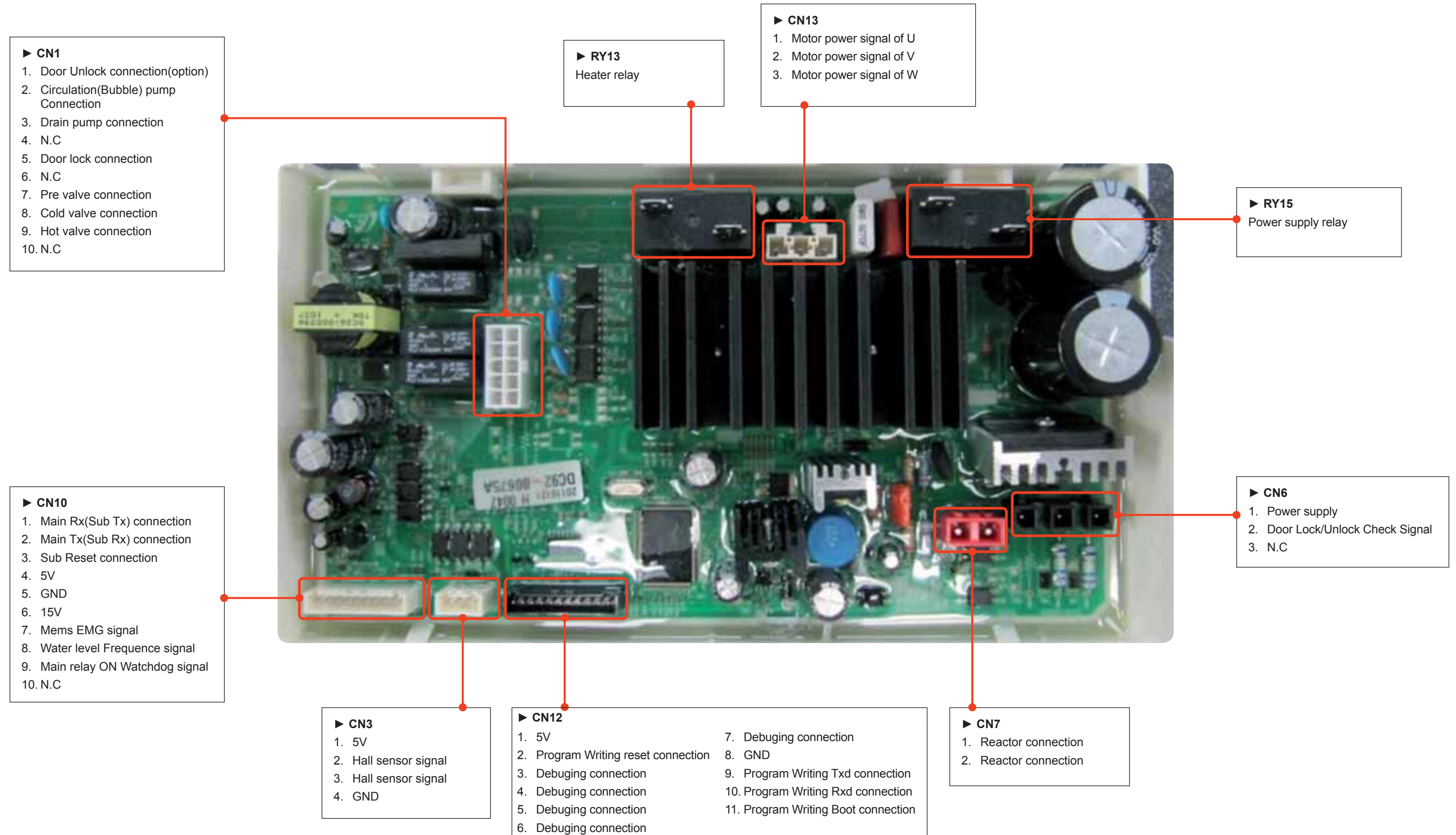
## 6. PCB DIAGRAM

### 6-1. MAIN PCB



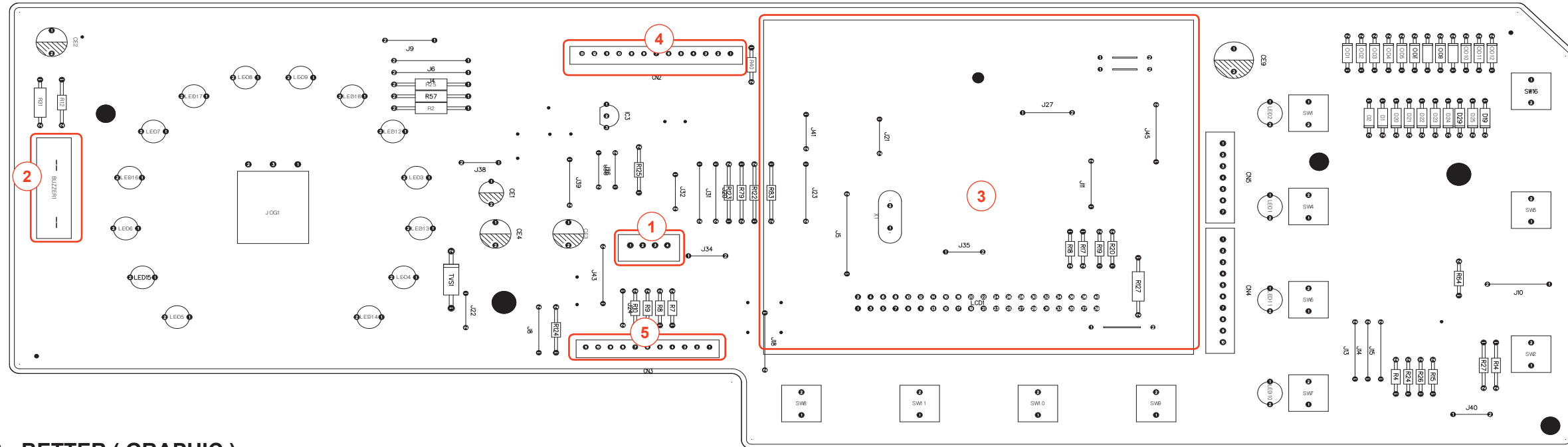
Location	Part No.	Function	Description
1	RY15	POWER SUPPLY RELAY	Receive 230 ACV to operate the PBA
2	RY13	HEATER RELAY	For driving the heater power
3	CN13	MOTOR CONNECTION TERMINAL	Connect with motor signal(U,V,W)
4	CN7	REACTOR CONNETION TERMINAL	Connect with reactor
5	CN1	TERMINAL FOR EACH DRIVING SECTION	Locks the door, supplies water and operates the drain and bubble pump
6	CN6	POWER SUPPLY AND DOOR CHECK TERMINAL	Receive 230 ACV to operate the PBA, Door Lock/Unlock check
7	CN3	MOTOR HALL SENSOR TERMINAL	Detects the motor hall sensor signal
8	CN10	SUB CONNECTION TERMINAL	Connect with SUB(Rx, Tx, Reset, 5V, GND, 15V, MEMS EMG, WATER LEVEL, WATCHDOG)
9	CN12	PROGRAM WRITING AND DEBUG TERMINAL	Connect when writing a program for updating or modifying the software

## 6-2. CIRCUIT DIAGRAMS OF MAIN PARTS

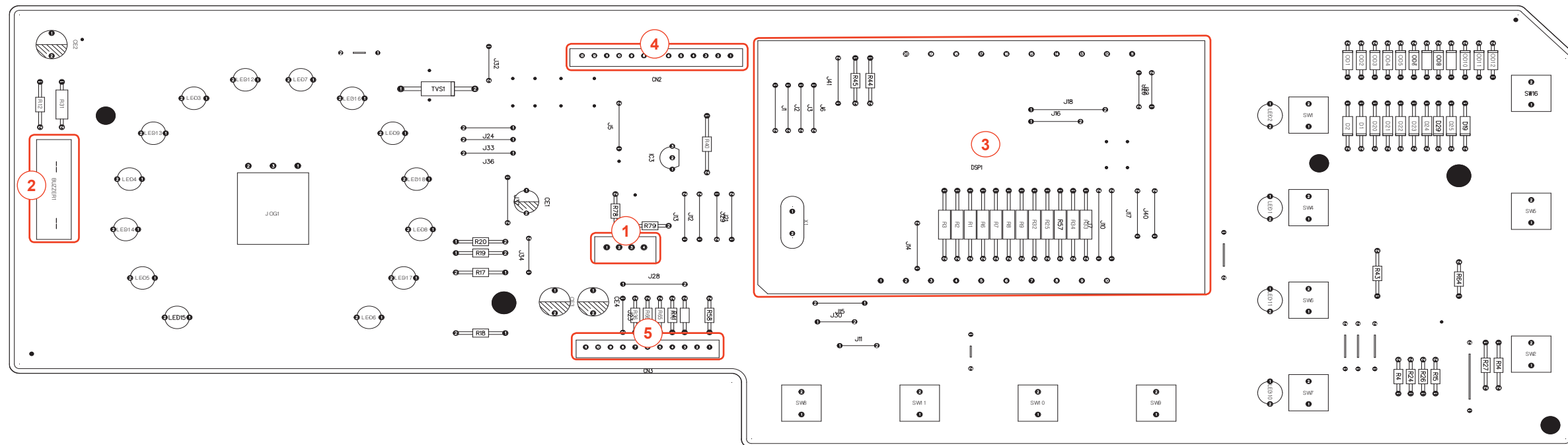




### 6-3. SUB PCB - BEST ( LCD )



### SUB PCB - BETTER ( GRAPHIC )



Location	Part No.	Function	Description
1	CN1	PROGRAM WRITING	CONNECT WHEN WRITING A PROGRAM FOR UPDATING OR MODIFYING THE SOFTWARE
2	BUZZER1	BUZZER CIRCUITRY	EMITS A SOUND WHEN A MENU KEY IS PRESSED OR WHEN A PROGRAM IS FINISHED
3	DSP1	TIME DISPLAY	DISPLAY THE REMAINING TIME OF THE SELECTED CYCLE(LCD OR GRAPHIC LED)
4	CN2	MEMS SENSOR & MAIN PBA Network Terminal	For controlled from MAIN PBA Connection between Main PBA and SUB PBA For controlled from SUB PBA Connection between SUB PBA and MEMS SENSOR
5	CN3	Water Lever / Thermal sensor / Leakage sensor connection terminal	Detects the water supply /drainage and the heater operation Detects the leakage state

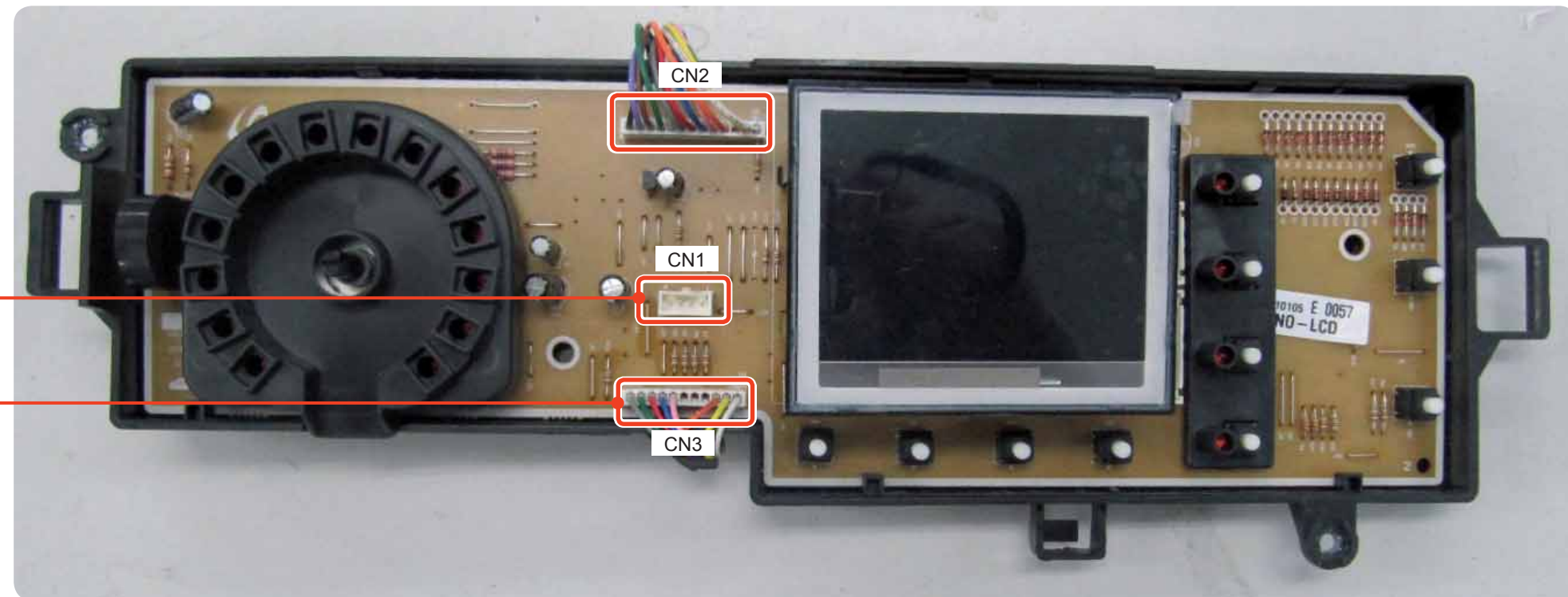
#### 6-4. DETAILED DESCRIPTIONS OF CONTACT TERMINALS (SUB PCB) - BEST (WF1124\*A\*)

► **CN1(PROGRAM WRITING PORT)**

1. 3.3V\_IS(SUB)
2. WC\_RESET
3. BKGD/MS(MICOM WRITING)
4. GND

► **CN3**

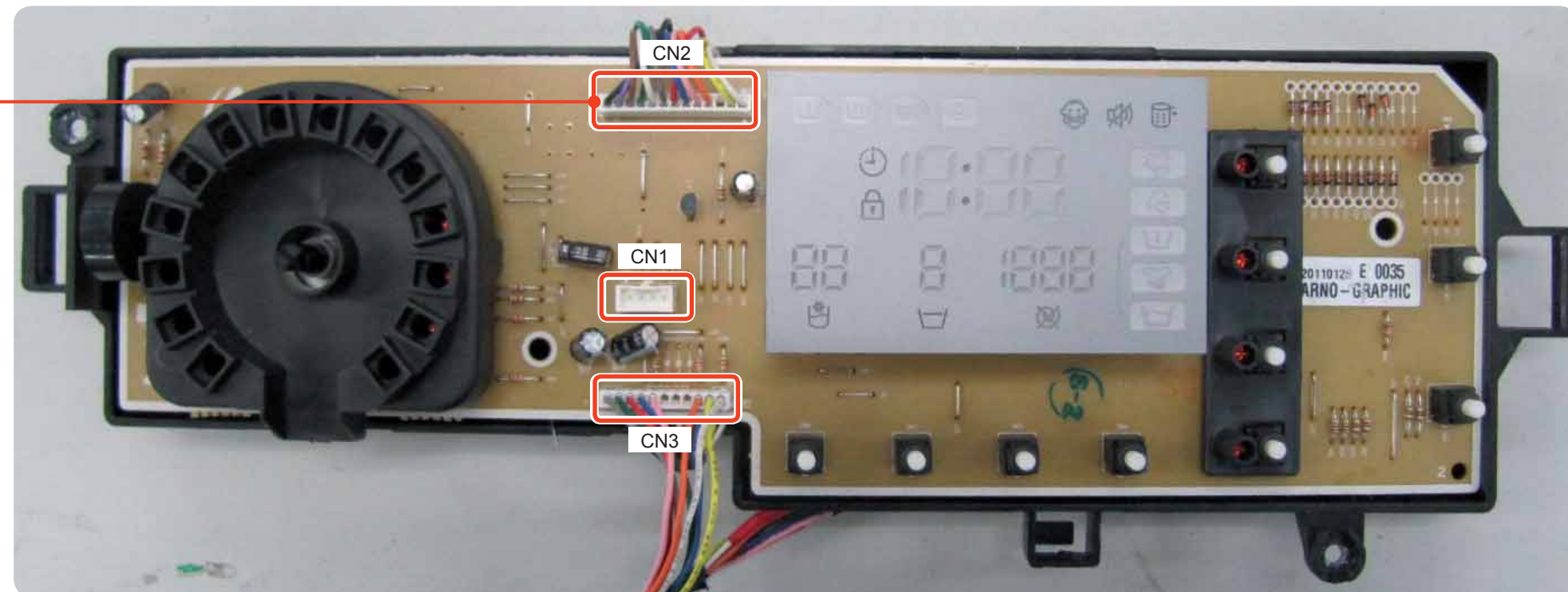
1. WATER LEVEL FROM SUB
2. FROM SUB TO MAIN REALY WATCHDOG
3. MEMS\_EMG
4. N.C
5. N.C
6. N.C
7. WATER THERMISTOR
8. GND
9. WATER LEVEL
10. WATER LEVEL
11. LEAKAGE FROM SUB



#### DETAILED DESCRIPTIONS OF CONTACT TERMINALS (SUB PCB) - BETTER (WF1124\*B\*)

► **CN2**

1. 3.3V\_IS(MEMS)
2. CS1(MEMS)
3. N.C
4. SPI(MEMS)
5. SDO\_C(MEMS)
6. SPC(MEMS)
7. GND
8. SUB RX(MAIN TX) CONNECTION
9. SUB TX(MAIN RX) CONNECTION
10. WC\_RESET
11. 5V\_IS(SUB)
12. GND
13. 15V\_IS(SUB)



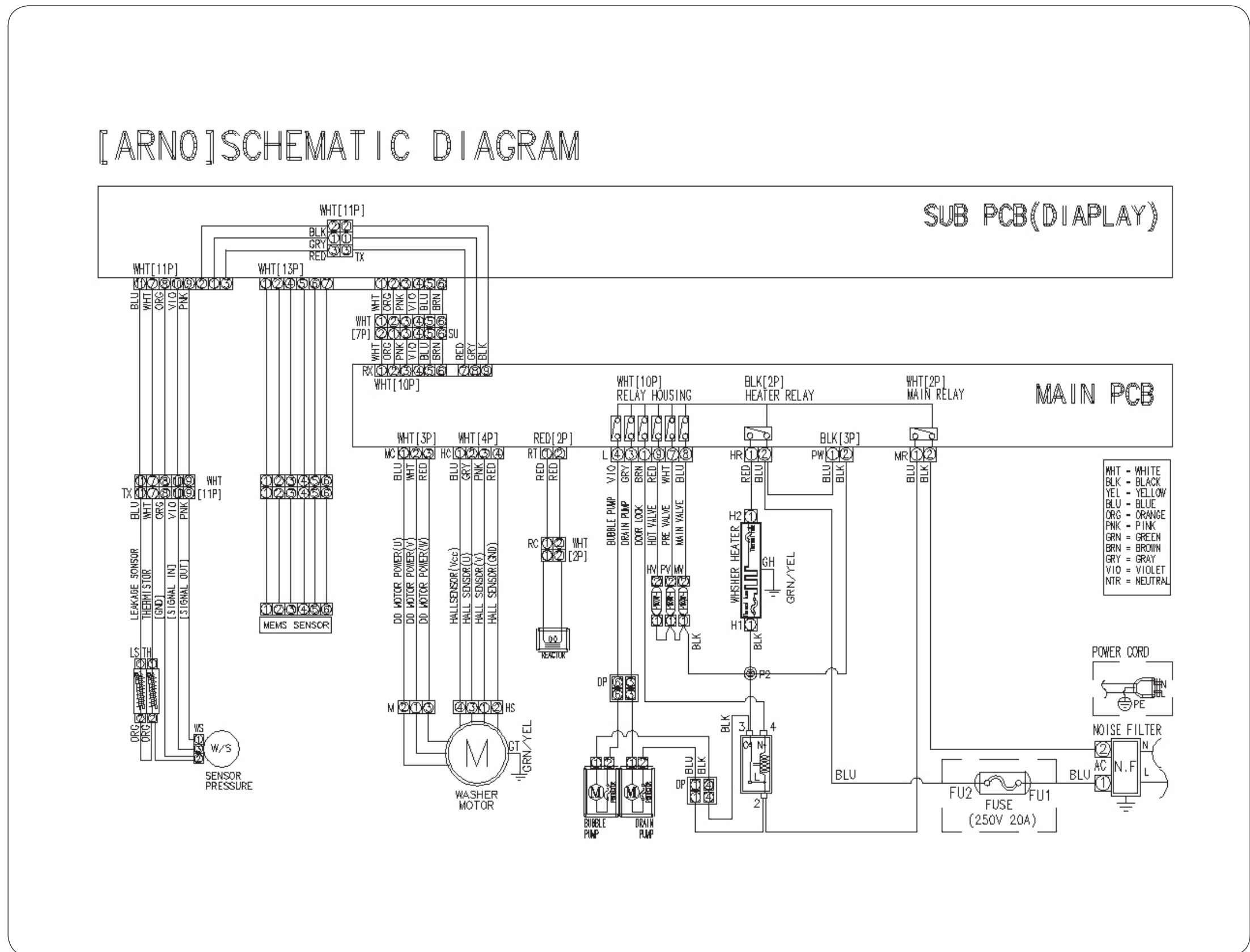
# 7. WIRING DIAGRAM

## 7-1. WIRING DIAGRAM

### ■ REFERENCE INFORMATION

BLK	BLACK
BLU	BLUE
GRN	GREEN
GRY	GRAY
NTR	NATURAL
ORG	ORANGE
PNK	PINK
RED	RED
SKYBLU	SKYBLUE
VIO	VIOLET
WHT	WHITE
YEL	YELLOW

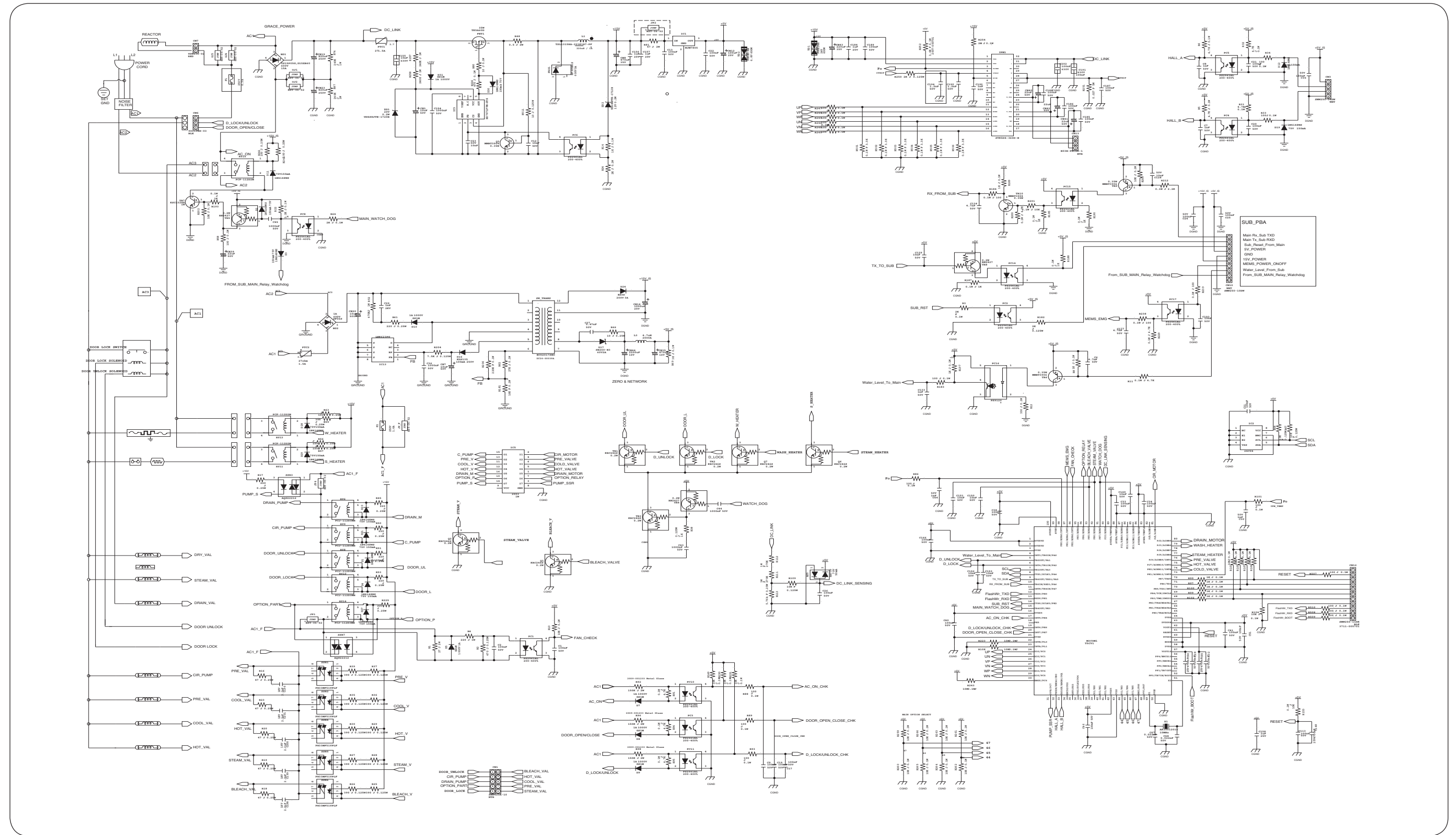
## [ ARNO ] SCHEMATIC DIAGRAM



# 8. SCHEMATIC DIAGRAM

## 8-1. MAIN CONTROL

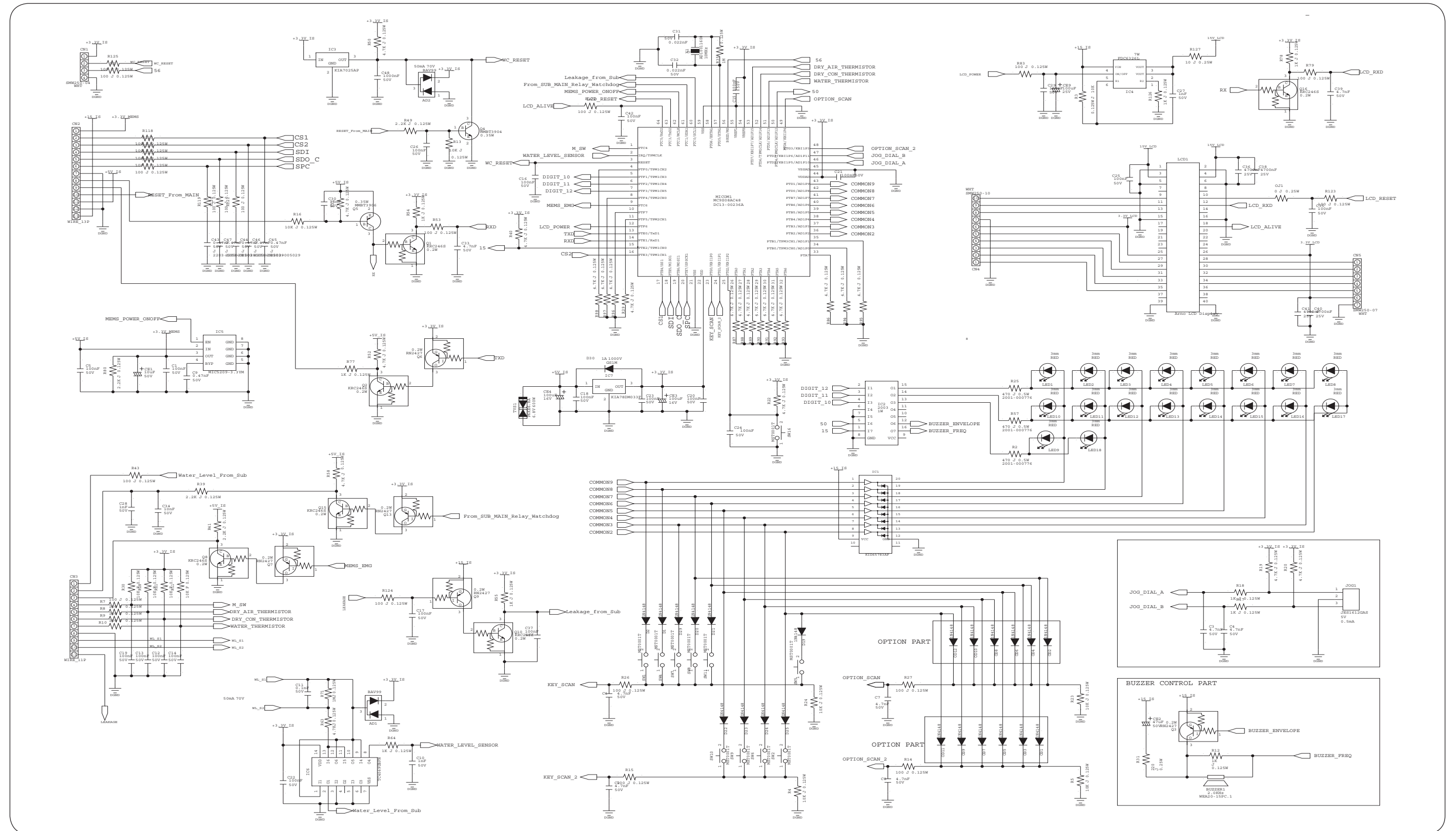
▶ This Document can not be used without Samsungs authorization.





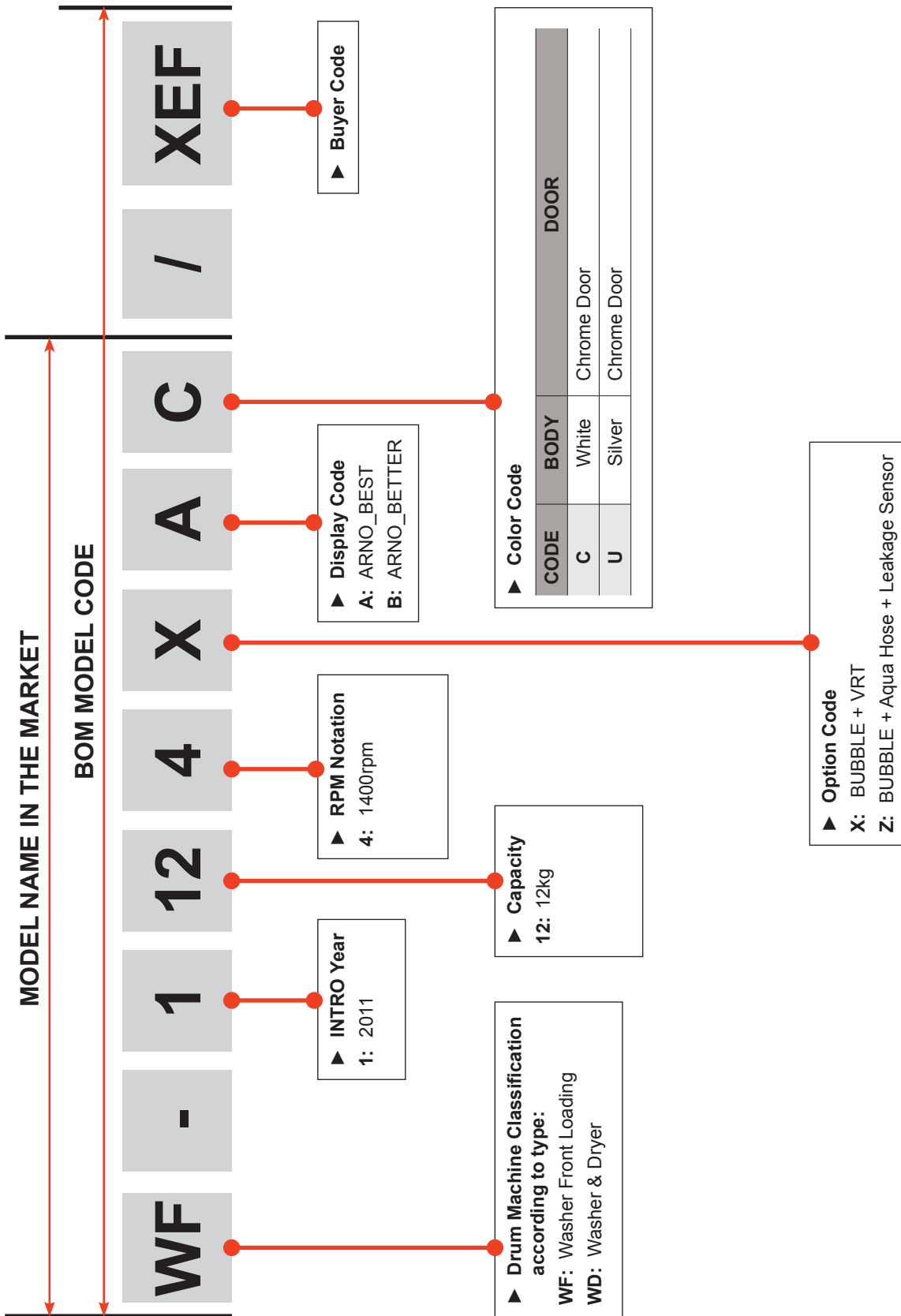
## 8-2. SUB CONTROL

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# 9. REFERENCE

## 9-1. ARNO PROJECT NAME





## GSPN (GLOBAL SERVICE PARTNER NETWORK)

Area	Web Site
America	<a href="http://gspn3.samsungcsportal.com">http://gspn3.samsungcsportal.com</a>
Europe, MENA, CIS, Africa	<a href="http://gspn1.samsungcsportal.com">http://gspn1.samsungcsportal.com</a>
China, Asia, Japan	<a href="http://gspn2.samsungcsportal.com">http://gspn2.samsungcsportal.com</a>

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